

November 2006

SAN LUIS VALLEY  
REGIONAL  
STRATEGIC TACTICAL  
INTEROPERABLE  
COMMUNICATIONS PLAN  
“STIC”



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## **Executive Overview**

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This document establishes a Strategic and Tactical Interoperable Communications (STIC) Plan for the San Luis Valley Region. The STIC Plan is intended to document what interoperable communications resources are available within the Region, who controls each resource, and what rules of use or operational procedures exist for the activation and deactivation of each resource.

This document also contains the Region’s Strategic plan for interoperable communications. The goal of the Strategic plan is to meet SAFECOM initiative level five (5), a Standards-based interoperable communications system that provides instant and disruption-resistant communications capabilities for all public safety and first responder agencies within the region.

The Regional STIC plan also addresses training and exercises to improve the interoperable capabilities of the responder agencies. These important initiatives will bring to light any gaps in the communications system and provide a strategy to address and correct identified gaps.

This plan is intended to be a part of each counties emergency operations plan and should be placed in the county plan as an annex.

## **Section 1. Region Information**

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### **1.1 Overview**

This STIC Plan has been created for the San Luis Valley All-Hazards Region. The San Luis Valley All-Hazards Region is defined to include all counties, cities, and towns.

The reporting jurisdictions in the San Luis Valley All-Hazards Region are as follows:

- Alamosa County
- City of Alamosa
- Town of Mosca
- Town of Hooper
- Conejos County
- Town of La Jara

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- Town of Antonito
- Town of Sanford
- Town of Manassa
- Costilla County
- Town of San Luis
- Town of Blanca
- Mineral County
- Town of Creede
- Saguache County
- Town of Center
- Town of Saguache
- Town of Moffat
- Town of Crestone
- Rio Grande County
- City of Monte Vista
- City of Del Norte
- Town of South Fork

The San Luis Valley All-Hazards Region appointed Jeff Babcock as the San Luis Valley All-Hazards Region POC and the PLAN Administrator.

This STIC Plan is intended to apply to the San Luis Valley All-Hazards Region, as defined above. Specifically, the plan is intended to be used by the first responder disciplines that would respond to the scene of an emergency, as well as other disciplines that would need to be coordinated with during the response. These include:

- Law Enforcement
- Fire Service
- Emergency Medical Services
- Hazardous Material Response
- Colorado State Patrol Alamosa Regional Communications Center
- State and Federal Agencies
- Rio Grande Sheriff Dispatch Center
- Costilla County Sheriff Dispatch Center
- Saguache County Sheriff Dispatch Center
- Mineral County Sheriff Dispatch Center
- Monte Vista Police Department Dispatch Center
- Center Police Department Dispatch Center
- Emergency Management
- Public Works
- County Public Health Agencies
- Government Administration
- Public School Districts
- Health Care

**1.2 Included Agencies**

The agencies represented in the STIC Plan are included in Table 1.2.1 below. See Appendix -----

**Table 1.2.1: Agencies Represented in the STIC Plan: Alamosa County**

<b>County</b>	<b>Agency</b>	<b>Contact</b>	<b>Email</b>	<b>Phone</b>
Alamosa	Alamosa County Sheriff Department	Dave Stong	dstong@alamosacounty.org	719-589-6608
Alamosa	Alamosa City Police Department	Ron Lindsey	pdrecord@cc.alamosa.co.us	719-589-2548

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Alamosa	Alamosa Fire Department	Don Chapman	drchap@my.amigo.net	719-580-2201
Alamosa	Alamosa Ambulance District	Ted Anderson	alaamb@amigo.net	719-587-1280
Alamosa	Alamosa County Road & Bridge	Phil West	pwest@alamosacounty.org	719-589-6262
Alamosa	Alamosa Regional Airport	Herry Andrews	<a href="mailto:handrews@alamosacounty.org">handrews@alamosacounty.org</a>	719-589-6639
Alamosa	San Luis Valley Regional Medical Center	Russ Johnson	johnsonr@slvrmc.org	719-589-2511
Alamosa	Alamosa City Public Works Department	Don Koskelin	pubwrks@cc.alamosa.co.us	719-589-6631
Alamosa	Alamosa School District	Henry Herrera		719-587-1600
Alamosa	Mosca-Hooper Fire Department	Blain Witherspoon	pccmv@vanion.com	719-588-7489
Alamosa	Adams State College Public Safety			719-587-7901
Alamosa	CSP Communications Center	Pam Stewart	pamela.stewart@cdps.state.co.us	719-589-5807
Alamosa	Public Health Nursing Service	Julie Geiser	jgeiser@alamosacounty.org	719-589-6639
Alamosa	Colorado Dept. of Transportation	Mike Delong	Miachael.delong@dot.state.co.us	719-589-3616
Alamosa	District Attorneys Office	Pete Comar	pcomar@da12.state.co.us	719-589-3691

**Table 1.2.2: Agencies Represented in the STIC Plan: Conejos County**

<b>County</b>	<b>Agency</b>	<b>Contact</b>	<b>Email</b>	<b>Phone</b>
Conejos	Conejos Co. Sheriff	Joe Tayler	conso@fone.net	719-376-2196
Conejos	LaJara Police Dept.	Richard Pena	fedrpena@yahoo.com	719-274-5886
Conejos	Sanford Police Dept.	Howard Galvez	sanfordpolice@hotmail.com	719-274-4024
Conejos	Manassa Police Dept.	Charles DeHerrera	manassapd@amigo.net	719-843-5207
Conejos	Conejos Ambulance District	Rodney King	rodneykk@hotmail.com	719-588-5001
Conejos	Conejos Hospital	Denise Stong		719-274-5121
Conejos	Public Health Nursing Service	Connie Edgar	<a href="mailto:connie@co.conejos.co.us">connie@co.conejos.co.us</a>	719-274-4307
Conejos	Conejos County Road and Bridge			719-376-5431
Conejos	Fox Creek Fire Dept.	Louis Mondragon		719-274-5159
Conejos	Sanford Fire Dept.	Tim Crowther	sanfpw@fone.net	719-588-4019
Conejos	LaJara Fire Dept.	Scott McCarrol	Rmac1953@yahoo.com	719-274-5027
Conejos	Manassa Fire Dept.	Richard Martin		719-843-5818
Conejos	Romeo Fire Dept.	Steve	evelync@vanion.com	719-588-2164

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		Sorenson		
Conejos	Carmel Fire Dept.	Brian Coleman		719-588-1621
Conejos	Capulin Fire Dept.	Robert Mondragon		719-274-5537
Conejos				

**Table 1.2.3: Agencies Represented in the STIC Plan: Costilla County**

<b>County</b>	<b>Agency</b>	<b>Contact</b>	<b>Email</b>	<b>Phone</b>
Costilla	Costilla County Sheriffs Dept.	Roger Benton	costillacops@yahoo.com	719-672-3302
Costilla	San Luis Town Marshall	Greg Brown		719-672-3210
Costilla	Blanca Town Marshall	Danny Sanchez		719-379-3810
Costilla	Costilla County Road and Bridge	Leroy Medina		719-672-3613
Costilla	Costilla County Ambulance	Lon Sawyer		719-672-3302
Costilla	Costilla County Fire Department	John Serna	sonicserna@aol.com	719-672-3302
Costilla	Wild Horse Mesa Fire Department	Brooks Fountain	brooksf@centruytel.net	719-672-3302
Costilla	Blanca Fire Department	Myrrl Smith	blanco@fone.net	719-672-3302
Costilla	Public Health Nursing Service	Vivian Gallegos		719-672-3332

**Table 1.2.4: Agencies Represented in the STIC Plan: Saguache County**

<b>County</b>	<b>Agency</b>	<b>Contact</b>	<b>Email</b>	<b>Phone</b>
Saguache	Saguache Sheriffs Dept.	Mike Norris	sagsomn@centurytel.net	719-655-2544
Saguache	Saguache Ambulance District	Scott Alexander	scottalexander@amigo.net	719-655-2206
Saguache	Center Police Department	Leroy Torrez		
Saguache	Saguache Fire Department	Wes Morris	wmoores@fone.net	
Saguache	Baca-Crestone Ambulance Service	Pam Gripp	bacaadmin@bacapoa.org	
Saguache	Baca Fire Department	Peter May	Earthdance_pdm@yahoo.com	
Saguache	Crestone Fire Department	Iracima Patton	iracimapatton@yahoo.com	
Saguache	KDF Fire Department			
Saguache	Public Health Nursing Service	Donna Newsom	coloradodream@aol.com	719-655-2533
Saguache	Saguache County Road and Bridge			719-655-2554



**Table 1.2.5: Agencies Represented in the STIC Plan: Rio Grande County**

<b>County</b>	<b>Agency</b>	<b>Contact</b>	<b>Email</b>	<b>Phone</b>
Rio Grande	Rio Grande County Sheriff Department	Brian Norton	<a href="mailto:rgso@amigo.net">rgso@amigo.net</a>	719-657-4000
Rio Grande	Public Health Nursing Service	Pat Perry		
Rio Grande	Del Norte Police Department	Bobby Fresquez		719-657-2600
Rio Grande	Monte Vista Police Department	Jim Gallegos	<a href="mailto:mvpolicechief@qwest.net">mvpolicechief@qwest.net</a>	719-852-5111
Rio Grande	South Fork Police Department	Dallas Ward		719-873-1042
Rio Grande	Monte Vista Ambulance Service	Dave Shields	<a href="mailto:mvamb@amigo.net">mvamb@amigo.net</a>	719-852-5970
Rio Grande	Del Norte Ambulance Service	Tolie Davie	<a href="mailto:dnamb@amigo.net">dnamb@amigo.net</a>	719-657-4000
Rio Grande	South Fork Ambulance Service	Howard Fleming	<a href="mailto:howardf@amigo.net">howardf@amigo.net</a>	719-873-5545
Rio Grande	Monte Vista Fire Department	Chuck Archer		719-852-5111
Rio Grande	Del Norte Fire Department	Gilbert Trujillo		719-657-4000
Rio Grande	South Fork Fire Department	Cody Burns		719-657-4000
Rio Grande	Rio Grande County Hospital	Dr. Norman Haug		719-657-2510
Rio Grande	Rio Grande Road and Bridge			719-852-4781

**Table 1.2.6: Agencies Represented in the STIC Plan: Mineral County**

<b>County</b>	<b>Agency</b>	<b>Contact</b>	<b>Email</b>	<b>Phone</b>
Mineral	Mineral County Sheriff Department	Phil Liggett	<a href="mailto:mincoso@fone.net">mincoso@fone.net</a>	719-658-2600
Mineral	Public Health Nursing Service	Sarah Scott		719-658-2416
Mineral	Mineral County Ambulance Service	J.B. Alexander	<a href="mailto:minamb@amigo.net">minamb@amigo.net</a>	719-658-2600
Mineral	Mineral County Fire District	Robert Hosselkus		719-658-2600
Mineral	Mineral County Road and Bridge	Danny Rodgers		719-658-2329

### **1.3 STIC Plan Point of Contact**

The primary point of contact (POC) that can be reached for questions regarding the Plan is:

Name: Jeff Babcock  
 Title: San Luis Valley Homeland Security Coordinator  
 Address: 8900 Independence Way, Alamosa, Colo. 81101  
 Phone: 719-480-1767  
 E-Mail: [slv.hls@amigo.net](mailto:slv.hls@amigo.net)



## Section 2. Governance

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### 2.1 Overview

This STIC Plan has been developed under the authority of the State All-Hazards Advisory Committee, (SAHAC) and Senate Bill 06-237.

The San Luis Valley All-Hazards Policy Committee is the governing authority for the San Luis Valley Regional All-Hazards Advisory Committee and the San Luis Valley All-Hazards Region. The members of the policy committee are comprised of a county commissioner from each of the six counties that make up the San Luis Valley.

The San Luis Valley All-Hazards Regional Communications sub-committee shall provide coordination for the development, implementation and updating of the STIC Plan. The Regional sub-committee shall at least once a year review and update the STIC plan and forward any changes to each Regional Communications Coordinator, County Emergency Manager and the Colorado Division of Emergency Management.

### 2.2 Membership

Appendix A provides point of contact information on members of the San Luis Valley All-Hazards Policy Committee and the San Luis Valley All-Hazards Regional Communications sub-committee.

### 2.3 Responsibilities of Region Governing Body

The governing body will hold the following responsibilities:

- Establishing and managing interoperable communications working groups
- Maintaining and updating this STIC Plan
- Adopting final solutions and direct implementation
- Establishing training requirements in support of this STIC Plan
- Coordinating and executing Memoranda of Understanding and Sharing Agreements for interoperable communications

### 2.4 Meeting Schedule:

**The governing body will have regular meetings on the last Monday of every other month 2 hours prior to the All Hazards Meeting. Time will be at 4:00p.m. and location is the Alamosa County Bldg, 8900 Independence Way, Alamosa, Co., unless otherwise notified.**

### 2.5 Agency Responsibilities and Rights

Agencies will retain the following rights and responsibilities:

- Agencies are responsible for agreeing to and complying with Memorandum of Understanding / Agreements developed by the Governing Body.
- Agencies agreeing to this plan have authority to request use of systems in accordance with Standard Operating Procedures (SOPs). Dispatch agencies and emergency communications centers of participating agencies have the authorization to request use of the systems.
- Where applicable, agencies will be responsible for maintaining, testing and exercising connectivity to interoperable communications systems.



## **2.6 Regional Interoperability Coordinators/Communication Unit Leaders**

The region, by written agreement, is authorized to appoint six Regional Interoperability Coordinators/Communications Unit Leaders who will be given the authority to coordinate and assign interoperability assets under the direction of the Incident Commander. County emergency managers or their designee should be considered first to staff this position. The role and authority of the Regional Interoperability Coordinators will be formalized in the Memoranda of Understanding and Sharing Agreements for interoperable communications executed by the Governing Body and agreed to by participating agencies. A central authority in each county for coordination of these assets better ensures the most appropriate resources can be assigned for a particular incident. Additionally, a central authority helps prioritize and coordinate resources when large scale incidents or multiple emergencies have occurred.

The Regional Interoperability Coordinators in the San Luis Valley Region are:

Regional Interoperability Coordinator, Alamosa  
Mr. Pete Magee

Regional Interoperability Coordinator, Rio Grande:  
Larry Messoline

Regional Interoperability Coordinator, Mineral:  
William Fairchild

Regional Interoperability Coordinator, Saguache:  
Mike Norris

Regional Interoperability Coordinator, Conejos:  
Rodney King

Regional Interoperability Coordinator, Costilla:  
Mathew Valdez

The six Regional Interoperability Coordinators will keep each other apprised of what interoperability assets are in use at any given time. If one of the Regional Interoperability Coordinators is unreachable for any reason, another Regional Interoperability Coordinator can be used as a backup. The Regional Interoperability Coordinators will be trained in communication protocols, San Luis Valley DTR network, CCNC protocols and incident command.

At any time the Regional Interoperability Coordinator may request additional communication resources from the state. When the same resources are requested for two or more incidents, the Regional Interoperability Coordinators will prioritize resource assignment based on the priority levels below:

1. Disaster, large scale incident or extreme emergency requiring mutual aid or interagency communications;
2. Incidents where imminent danger exists to life or property;
3. Pre-planned events requiring mutual aid or interagency communications;
4. Incidents requiring the response of multiple agencies;
5. Incidents involving a single agency where supplemental communications are needed for agency use;
6. Drills, tests and exercises.

If there are two or more incidents occurring simultaneously and conflicts arise concerning a specific radio channel, the channel should go to the organization with the wider span of



control/authority. This shall be determined by the State Interoperability Executive Committee or Regional Planning Committee for the operation or by the levels of authority/government identified in the contention.

## **Section 3. Interoperability Equipment**

This section describes all interoperable equipment in the urban area.

### **3.1 Radio Cache**

Refers to maintaining a cache of standby radios that can be deployed to support regional incidents. These radios may be from a regional cache, or from a participating agency. This allows all responders to use a common, compatible set of radios during an incident. Specific caches within the region are listed in the table below. More detailed information on each radio cache is documented in Appendix B.

**Table 3.1.1 Radio Caches in the Region 700/800 MHz Digital Radios.**

<b>County</b>	<b>Agency</b>	<b>Quantity</b>	<b>Type</b>
No large cache in Region			

**Table 3.1.2 Radio Caches in the Region VHF Radios.**

<b>County</b>	<b>Agency</b>	<b>Quantity</b>	<b>Type</b>
Alamosa	RETAC	20	Vertex VX-180

### **3.2 Shared Channel**

“Shared channels” refer to common frequencies or channels (such as those of a participating agency) that have been established and are programmed into radios to provide interoperable communications among agencies. Specific shared interoperable communications channels available within the region are listed in the table below. More detailed information on each channel is documented in Appendix C.

**Table 3.1.2 Shared Channels in the Region 700/800 MHz DTR’s**

<b>Primary Use</b>	<b>Name</b>	<b>Description</b>	<b>Frequency/Disignation</b>	<b>CTCSS</b>
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Alamosa County	Alamosa Mutual Aid (MAC)	For use within Alamosa County for multiple agency response. May also be used by other counties when additional county MAC channels are needed.	Ala MAC	
Rio Grande County	Rio Grande Mutual Aid (MAC)	For use within Rio Grande County for multiple agency response. May also be used by other counties when additional county MAC channels are needed.	RIO MAC	
Conejos County	Conejos County Mutual Aid (MAC)	For use within Conejos County for multiple agency response. May also be used by other counties when additional county MAC channels are needed.	CON MAC	
Costilla County	Costilla County Mutual Aid (MAC)	For use within Costilla County for multiple agency response. May also be used by other counties when additional county MAC channels are needed.	COS MAC	
Mineral County (currently Mineral County does not have full DTR coverage)	Mineral County Mutual Aid (MAC)	For use within Mineral County for multiple agency response. May also be used by other counties when additional county MAC channels are needed.	MIN MAC	
Saguache County	Saguache County Mutual Aid (MAC)	For use within Saguache County for multiple agency response. May also be used by other counties when additional county MAC channels are needed.	SAG MAC	

**3.3 Gateways None in Region**



### 3.4 MOBEXCOM Repeaters

MOBEX communication repeaters are systems that extend or interconnect one talkgroup with another. It also can extend the range of a talk group into a geographical area that does not have a strong DTR' network signal. This vehicular repeater configured as an extender allows portable radio us in areas with only mobile or limited coverage. They may be installed in a trailer or command vehicle, police vehicle, Ambulance or Fire vehicle. Configured as a true full duplex repeater, MOBEXCOM allows users at an incident to communicate between themselves and also to dispatch from a remote location.

**Table 3.1.4 MOBEX Systems in the Region**

County	Agency	Type	Quantity	Fixed/Mobile
Alamosa	Alamosa Sheriff	MOBEXCOM	2	Mobile Trailer/ Incident Command Vehicle
Mineral	Mineral Sheriff	MOBEXCOM	1	Mobile Trailer

### 3.4 Shared System

“Shared systems” refers to the use of a single radio system infrastructure to provide service to most Public Safety agencies within a region. Details on each system are provided in Appendix E.

**Table 3.1.4 Shared Systems in the Region**

Name	Service Area	Radio System	Public Safety Agencies Supported
San Luis Valley DTR Users	Alamosa County Conejos County Costilla County Mineral County Rio Grande County Saguache County	Motorola SmartZone, V6.5	Alamosa County Sheriffs Office Alamosa Police Department Alamosa Fire Department Mosca-Hooper Fire Department Alamosa Ambulance Service San Luis Valley Haz Mat Conejos County Sheriffs Office La Jara Police Department Manassa Police Department Sanford Police Department Antonito Fire Department Fox Creek Fire Department Romeo Fire Department Carmel Fire Department Capulin Fire Department La Jara Fire Department Sanford Fire Department Manassa Fire Department Conejos County Ambulance Costilla County Sheriffs Office Blanca Marshall San Luis Marshall Costilla County Fire Department



			Blanca Fire Department Costilla Ambulance Service Mineral County Sheriffs Office Mineral County Fire Department Mineral County Ambulance Rio Grande County Sheriffs Office Monte Vista Police Department Del Norte Police Department South Fork Police Department Monte Vista Ambulance Service Del Norte Ambulance Service South Fork Ambulance Service Del Norte Fire Department South Fork Fire Department Monte Vista Fire Department Saguache County Sheriffs Office Center Police Department Saguache Fire Department .
			Villa Grove Fire Department Center Fire Department Baca Grande Fire Department Saguache Ambulance Service Center Ambulance Service Baca Grande Ambulance Service

Table 3.1.4 Shared Systems State/Federal Agencies

Name	Service Area	Radio System	Public Safety Agencies Supported
State of Colorado Agencies	San Luis Valley Region	Motorola SmartZone, V6.5	Colorado State Patrol Colorado Department of Transportation Colorado Division of Wildlife Colorado State Parks Colorado State Brand Inspector Colorado Ports of Entry Colorado State Probation and Parole



### 3.5 Communications Vans/Incident Command Vehicles

Communications Vans/Incident Command Vehicles should be listed as to capabilities (VHF, UHF, 800 DTRS, etc.), location, type (van, box truck, etc.), and management oversight (Region/local, Law Enforcement, Fire, etc.)

Type (Van, box truck)	Location	Capabilities (VHF, UHF, 800, etc.)	Management
Class A Motor Home	Alamosa, CO	800mHz Digital Trunk Radio	Alamosa County Sheriffs Office

### 3.6 Satellite/ Cellular Phones

Satellite cell phones are issued to the following Ambulance services. This equipment may be used to supplement other types of communications within the region. The table indicates which EMS service has satellite cell phones assigned to them. (note: a clear view of the sky is required for the units to operate properly)

Type	Location	Number of units	Management
	Baca Crestone EMS	2	Pam Gripp
	Del Norte Ambulance	3	Tollie Davies
	Conejos Ambulance	3	Rodney King
	Costilla Ambulance	2	Lon Sawyer
	Saguache Ambulance	2	Scott Alexander
	South Fork Ambulance	3	Howard Flemming
	Mineral Ambulance	3	Phillip Leggett
Qualcomm/ Globalstar- GSP 1600	Saguache Sheriff's Dept.	3	Mike Norris



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## 4.1 Section 4. Policies & Procedures for Interoperable Equipment

### 4.1.1 Radio Cache Provider Responsibilities

For a radio cache to be an effective shared resource, it should have the following characteristics:

- Be fully charged and maintained, ready for deployment at all times
- Include extra charged batteries for extended deployments
- VHF and UHF radios are encouraged to use battery packs that use commonly found dry alkaline batteries.
- Available personnel to transport the radios to the incident scene.
- Check-out and tracking procedures are used during the incident to ensure the radios are properly returned to the cache following the incident.

All VHF radio caches are required to have the following channels programmed:

Frequency	CTCSS	Description
		National Search and Rescue
155.475/155.475	None	Law Enforcement Emergency (NLEEC)
154.265/154.265	None	Fire Mutual Aid (red)
154.280/154.280	None	Fire Mutual Aid (white)
154.295/154.295	None	Fire Mutual Aid (blue)
155.370/155.370	None	Law Enforcement Intercity
155.340/155.340	None	EMS Medical Resource & Scene Coordination

All UHF radio caches are required to have the following channels/Frequencies programmed:

Frequency	CTCSS	Description
467.950 Tx— 462.950 Rx		Med 9 –EMS paging and talk around. Located on San Antonio Mountain, Poole Table Mountain, Saguache Peak Mountain, Town of San Luis, CO

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All 800 MHz radio caches are required to have the following channels programmed

Frequency	CTCSS	Description
Digital		Alamosa County Mutual Aid Channel (ALA MAC)
		Conejos County Mutual Aid Channel (CON MAC)
		Costilla County Mutual Aid Channel (COS MAC)
		Mineral County Mutual Aid Channel (MIN MAC)
		Rio Grande County Mutual Aid Channel (RG MAC)
		Saguache County Mutual Aid Channel (SAG MAC)
		ARCC-5 (All other agencies)
		MAC 13 SW
		MAC 14 SW
		MAC 15 SW
		MAC 16 SW
		MAC 9 SE
		MAC 10 SE
		MAC 11 SE
		MAC 12 SE
		MAC 5 NE
		MAC 6 NE
		MAC 7 NE
		MAC 8 NE
		MAC 1 MET
		MAC 2 MET
		MAC 3 MET
		MAC 4 MET
		MAC 17 NW
		MAC 18 NW
		MAC 19 NW
		MAC 20 NW
		MAC 21 SW (Statewide)
866.100		SIMP 1
866.750		SIMP 2
867.300		SIMP 3
867.550		SIMP 4
868.6875		SIMP 5
866.5125/821.5125		ITAC 1
867.0125/822.0125		ITAC 2
867.5125/822.5125		ITAC 3
868.0125/823.0125		ITAC 4
868.7875/823.7875		ITAC 5

**4.1.2 Radio Cache Rules of**

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- a



tional Incident Management System (NIMS) - Use of an Incident Command System compliant with the NIMS is required for use of any regional interoperability resource.

- Plain language - All Communications shall be in plain language. Radio codes, acronyms and abbreviations are to be avoided as they may cause confusion between agencies. Additionally, it should be understood that plain words such as “help”, “assistance”, “repeat” and “back-up” may have different operational meanings to different agencies. The word “Help” should not be used alone unless in the context of a life-threatening situation. Requests for assistance or backup should clarify the reason for the request.
- Unit Identification - Agency name or identifier shall precede unit identifier.
- CCNC Radio Standard Operating Procedures and San Luis Valley Digital Trunk Radio protocols will be used.

#### **4.1.3 Interoperable Communications Request**

- A. The Incident Commander will determine when a situation exists that requires use of a regional interoperability resource and notify his/her dispatch center or the SLV Alamosa Regional Emergency Operations Center.
- B. The dispatch center having jurisdiction over the location of the incident follows internal agency procedures to contact a Regional Interoperability Coordinator and relays pertinent information regarding the event.
- C. The following information is provided by the requesting agency at the time of an activation request:
  - User’s agency
  - On-scene agencies requiring interoperability
  - Interoperability resources required
  - Reason for request / type of event
  - Expected duration of event
  - User/requestor and/or servicing dispatch contact phone number
- D. In the event that the agency activates its own radio cache, the Regional Interoperability Coordinator is notified and provided the above information.
- E. The Regional Interoperability Coordinator determines what regional resources are available for use and identifies a specific radio cache. The Regional Interoperability Coordinator activates the appropriate resource. For example, if a radio cache is activated, the Regional Interoperability Coordinator contacts the agency head in charge of the specific radio cache to deploy the resource.
- F. The Regional Interoperability Coordinator coordinates the deployment by providing the contact information for the radio cache to the Incident Commander or their designee.

#### **4.1.4 Radio Cache Activation**

- A. Each Radio Cache Manager will provide an estimated response or activation time, which will be relayed to the dispatch center of the agency having jurisdiction over the incident and the Incident Commander.
- B. Radio Caches will be sent to the incident scene along with a knowledgeable individual, if possible, who will be responsible for supporting the radios, including fully charged spare batteries.



- C. Each radio in the radio cache will have a unique identification number for inventory tracking.
- D. The Logistics Chief will be responsible for keeping a list at the incident of each user to whom a radio has been distributed, the agency of the user and the identification number of the radio(s) provided to that individual, and frequency/channel of use.
- E. Each user and/or agency that receives a radio from the radio cache will be responsible for the return of that radio to the cache at the end of the incident.
- F. Lost or damaged radios will be reported to the Logistics Chief.

#### **4.1.5 Radio Cache Deactivation**

- A. The Incident Commander will determine when the regional interoperability asset is no longer required.
- B. The Incident Commander or Logistics Section Chief will be responsible for coordinating the return of cache radios to the Regional Interoperability Coordinator and or the agency that supplied the resource.
- C. At the end of the incident, the Radio Cache Technician will be responsible for inventorying all radios returned to the cache. Before leaving the incident scene, the technician will determine if any radios have not been returned to the radio cache and note the user and/or agency to which the radio was distributed. This information will be provided to the Incident Commander or Logistics Section Chief. If the missing radios cannot be recovered at the incident scene, the technician will provide this information to the Radio Cache Manager for resolution.

#### **4.1.6 Problem ID and Resolution**

- A. Myers Electronics and SpectraCom are the regions designated radio technicians for use with all radio caches. Radio caches that belong to State Agencies are the responsibility of the State Telecommunications technician. The Logistics Chief will coordinate with local communication companies to resolve any problems and develop a resolution plan to correct the problems.
- B. After an incident has been concluded, any agencies using radio caches may report problems with the specific radio cache to the San Luis Valley All-Hazards Region Communications Sub-committee. See Appendix A for Point of Contact information for the San Luis Valley All-Hazards Region Communications Sub-committee.
- C. The San Luis Valley All-Hazards Region Communications Sub-committee will be responsible for ensuring effective resolution to problems that exist with interoperability resources.
- D. During deployment, problems with individual radios will be reported to the technician who was dispatched to the scene.

## **4.2 Shared Channels: NPSPAC Mutual Aid Channels**

The procedures in section 4.2 apply to the NPSPAC Mutual Aid channels as shown in Table 4.2.1.



**Table 4.2.1 – NPSPAC Mutual-Aid (MA) Frequencies**

Name	Description	Frequency	CTCSS
I-CALL	NPSPAC Calling Channel	866.0125/821.0125	156.7
I-TAC1	NPSPAC Tactical 1	866.5125/821.5125	156.7
I-TAC2	NPSPAC Tactical 2	867.0125/822.0125	156.7
I-TAC3	NPSPAC Tactical 3	867.5125/822.5125	156.7
I-TAC4	NPSPAC Tactical 4	868.0125/823.0125	156.7
I-TAC5	NPSPAC Tactical 5		

**4.2.1 Definitions – See Appendix H for a complete list of definitions and terms**

**4.2.2 Overview of NPSPAC Mutual Aid (MA) Channel Use**

- **County MAC-** Similar to the State regional mutual aid channels county Mutual Aid Channels are for agencies use within each county/city and are also designated for use region wide.

The field unit notifies the Regional Communications Center (RCC) and or the County/City Communications center for assignment of a mutual aid talk around channel (MA-TAC). Each RCC should know where the local Mutual Aid TAC repeaters are within their jurisdictional responsibility and what area(s) they cover. This will become most important if a second mutual aid incident arises. Coordination between dispatchers to select the right MA-TAC channel is vital to each specific incident. These MA-TAC channels usually cover smaller areas (i.e., a county/city area in comparison to State mutual aid channels).

**4.2.3 Mutual Aid Channel Rules of Use**

The Mutual Aid Channels in the region will be reserved for inter-communication in situations requiring the coordination of multiple public safety entities. They shall not be used for administrative or intra-agency communications unless so directed during a major emergency disaster situation.

- Examples of Proper Use of the Mutual Aid Channels:
  - As working channels for multiple fire departments fighting a fire together.
  - For coordinating communications between the Incident Commander and the appropriate dispatch center or emergency operations center.
  - For coordination during a police chase through multiple jurisdictions where the agencies have no other communications link with each other.
  - For Communications during extended joint operations between multiple police agencies such as drug operations, riots, etc.



- For coordination during recovery operations after a disaster such as a flood when local, state, and federal officials require a common communications link.

Other rules of use:

- National Incident Management System- Use of an Incident Command System compliant with the National Incident Management System is required for use of any regional interoperability resource.
- Plain language - All Communications shall be in plain language. Radio codes, acronyms and abbreviations are to be avoided as they may cause confusion between agencies. Additionally, it should be understood that plain words such as “help”, “assistance”, “repeat” and “back-up” may have different operational meanings to different agencies. The word “Help” should not be used alone unless in the context of a life-threatening situation. Requests for assistance or backup should clarify the reason for the request.
- Unit Identification - Agency name or identifier shall precede unit identifier.
- Cross-Patching or telephone patching is not allowed on any of the Mutual Aid channels; except, in accordance with the State Plan for disaster situations.
- Talk-around is prohibited on the NPSPAC Calling Channel (866.0125 MHz).

#### 4.2.4

##### State Assistance/Control Procedures

- A. Assistance/control from the State Regional Communications Center (SRCC) may be requested under the following conditions.
  - i. The moving incident can no longer be operated or monitored effectively by the originating LCC.
  - ii. The incident (moving or stationary) is such that it would benefit from assistance control of the SRCC.
  - iii. Sufficient lead-time and briefing for the SRCC is provided by the LCC.
- B. Given i, ii, or iii above, the SRCC will assume control of the mutual aid channel as the lead dispatcher throughout the remaining duration of the incident.

When monitoring mutual aid channels, if units are heard communicating and there is a question of authorization, the dispatcher should request unit identification. If unauthorized communications are taking place, adjoining RCCs should be called to identify the users. Officer safety may be compromised if the channel(s) are inadvertently disabled or otherwise altered. If unauthorized traffic is being passed, the primary or back-up RCC can disable the repeater to halt its use. Follow-up activity by the RCC taking action should ensure future unauthorized use is mitigated.

#### **4.2.5 Problem ID and Resolution**



- A. The dispatch center having jurisdiction over the location of the incident reports any problems experienced to the Region Communications Sub-committee. See Appendix A for Point of Contact information for the San Luis Valley Regional Communications Sub-committee.
- B. The SLV All Hazards Region Communications Sub-committee will be responsible for ensuring effective resolution to problems that exist with interoperability resources.

**Table 4.2.2 List of State Regional Communication Centers (SRCCs)**

<b>Name</b>	<b>Location</b>	<b>Responsible Agency</b>
Alamosa Regional Communications Center (designated as the regional E-911 PSAP)	1205 West Avenue Alamosa, CO 81101 719-589-5807	Colorado State Patrol Communications Section

**Table 4.2.3 List of Local Communication Centers (LCC)**

<b>Name</b>	<b>Location</b>	<b>Responsible Agency</b>
Rio Grande Communications Center	925 Cherry St. Del Norte, Colo	Rio Grande County Sheriff Dept.
Saguache County Communication Center	530 5 <sup>th</sup> Street, Saguache, Colo 81149	Saguache County Sheriff Dept.
City of Center Communication Center, (designated as the backup E-911 PSAP)	671 E. 3 <sup>rd</sup> , Center, Colo.	Center Police Department
City of Monte Vista Communications Center	720 First Avenue, Monte Vista, Colo.	Monte Vista Police Department
Costilla County Communications Center	103 Gasper St. San Luis, Colo.	Costilla County Sheriff's Dept.



Mineral County Communications Center	1201 Main St. Creede, Colorado	Mineral County Sheriff's Dept.

#### 4.3 Shared Channels: All Other Shared Channels

The procedures in this section apply to all other shared channels not addressed in section 4.2. These include the channels in the table below. Appendix C has more information on these mutual aid channels. NOTE: There are no low band frequencies, (39MHz-46MHz) in use in the San Luis Valley region.

**Table 4.3.1 – Other Emergency and Mutual-Aid Frequencies**

Primary Use	Name	Description	Frequency	CTCSS
Emergency Management	EM	Statewide Emergency Management	39.18/39.18	156.7
Emergency	VH-LMA	Law Mutual Aid VHF High	155.475/154.950	None
Fire Emergency	FG-Red FG-White FG-Blue	Fire Ground Red Fire Ground White Fire Ground Blue	154.265/154.265 154.280/154.280 154.295/154.295	None None None
EMS Medical Coordination	V-EMS U-EMS U-EMS	VHF Medical Coordination UHF Medical Coordination UHF Medical Coordination	155.340/155.340 462.950/462.950 462.950/467.950	None 94.8 94.8
National Interoperability	I-CALL I-TAC1 I-TAC2 I-TAC3 I-TAC4 I-TAC5	NPSPAC Calling Channel NPSPAC Tactical 1 NPSPAC Tactical 2 NPSPAC Tactical 3 NPSPAC Tactical 4	866.0125/821.0125 866.5125/821.5125 867.0125/822.0125 867.5125/822.5125 868.0125/823.0125	156.7 156.7 156.7 156.7 156.7

##### 4.3.1 Shared Channels Rules of Use

The Shared Channels in the region will be reserved for inter-communication in situations requiring the coordination of multiple public safety entities. They shall not be used for administrative or intra-agency communications unless so directed during a major emergency disaster situation.

- Examples of Proper Use of the Shared Channels:
  - As working channels for multiple fire departments fighting a fire together.
  - For coordinating communications between the Incident Commander and the appropriate dispatch center or emergency operations center.



- For coordination during a police chase through multiple jurisdictions where the agencies have no other communications link with each other.
- For Communications during extended joint operations between multiple police agencies such as drug operations, riots, etc.
- For coordination during recovery operations after a disaster such as a flood when local, state, and federal officials require a common communications link.

Other rules of use:

- National Incident Management System- Use of an Incident Command System compliant with the National Incident Management System is required for use of any regional interoperability resource.
- Plain language - All Communications shall be in plain language. Radio codes, acronyms and abbreviations are to be avoided as they may cause confusion between agencies. Additionally, it should be understood that plain words such as “help”, “assistance”, “repeat” and “back-up” may have different operational meanings to different agencies. The word “Help” should not be used alone unless in the context of a life-threatening situation. Requests for assistance or backup should clarify the reason for the request.
- Unit Identification - Agency name or identifier shall precede unit identifier.
- Cross-Patching or telephone patching is allowed on any of the shared channels when requested by the incident commander.
- Talk-around is prohibited on the NPSPAC Calling Channel (866.0125 MHz).

#### **4.3.2 Shared Channel Procedures**

- A. If an individual responder needs to talk to an agency with which they do not otherwise have communications, the responder notifies dispatch that they need to operate on one of the interoperability channels. Dispatch or the responder can determine the appropriate channel.
- B. For an extended incident, the dispatcher is responsible for notifying the incident commander that an interoperability or mutual aid channel is in use.
- C. The SLV DTR Protocols (see Appendix I), should be used whenever possible to coordinate DTR radio traffic during incidents or emergencies.
- D. When a responder is dispatched to an incident, each agency dispatcher is responsible for notifying responders what interoperability or mutual aid channels are being used for the incident.
- E. The Incident Commander determines when the interoperability or mutual aid channel(s) is (are) no longer required and notifies his/her dispatch center.
- F. The dispatch center having jurisdiction over the location of the incident notifies each responding agency that operations on the channel(s) are ending.

#### **4.3.3 Problem ID and Resolution**



- A. The dispatch center having jurisdiction over the location of the incident reports any problems experienced to the SLV Regional All Hazards Communications Sub-committee. See Appendix A for Point of Contact information for the SLV Regional All Hazards Communications Sub-committee.
- B. The SLV Regional All Hazards Communications Sub-committee will be ultimately responsible for ensuring effective resolution to problems that exist with interoperability resources.

**4.4 Fixed Site Gateways None in Region at this time (section is kept for future use)**

This document provides guidance on use of the radio communication gateways located in the Regional Communications Center to request interoperable communications between local, state, and federal agency commanders during emergency incidents.

**Table 4.4.1 – Fixed Gateway Control Points**

<b>Local</b>	•	•	•
<b>State</b>	• r	•	•
<b>Federal</b>	•	•	•

**4.4.1 Participating Agencies**

**4.4.2 Fixed Site Gateway Communications Request**

A radio user requiring direct communications with a user from a different agency shall follow their own agency’s procedures for requesting connectivity. Typically, a user should request a patch by contacting their own agency’s dispatcher.

The dispatch center having jurisdiction over the location of the incident follows internal agency procedures to contact the Regional Communications Center and relays pertinent information regarding the event.

The following information is provided by the requesting agency at the time of an activation request:

- a. User’s agency



- b. Agencies or frequencies/talk groups to connect
- c. Reason for request / type of event
- e. Expected duration of event
- f. User/requestor contact phone number

The Regional Interoperability Coordinator determines what regional interoperability resources are available for use and identifies and activates a specific resource. For example, if a gateway is activated, the Regional Interoperability Coordinator contacts the Gateway Manager to activate that device.

The Regional Interoperability Coordinator coordinates the deployment by providing the contact information for the gateway to the Incident Commander or their designee.

#### **4.4.3 Fixed Site Gateway Activation**

Once authorization has been granted from your agency, each fixed site gateway agency should follow their internal procedures for activating the connectivity.

#### **4.4.4 Fixed Site Gateway Deactivation**

When the interoperable communications connection or patch is no longer required, agencies should follow these deactivation procedures—

- A. The requesting agency/user or incident commander where the emergency event occurred shall contact their dispatcher so that the patch can be deactivated
- B. If the connection does not include units from the control point dispatch jurisdictions, the requesting agency/user shall contact the control point dispatcher to deactivate the patch
- C. The control point dispatcher shall make an announcement on the interoperable channel/talkgroup indicating that the connection will be deactivated prior to the connection being disabled
- D. All personnel shall return to their appropriate home system channel assignments.

#### **4.4.5 Fixed Site Gateway Rules of Use**

The following rules of use shall govern interoperable communications between agencies:

- o Connectivity between agencies shall only be requested for working emergency events as defined by the Region
- o All radio traffic should be in plain language. The use of 10-Codes and specific agency acronyms is discouraged
- o All encrypted radio users will be required to work in the “clear” mode
- o During emergency events with multiple agencies, the designated incident commander may limit the interoperable channel/talkgroup to command level staff



- The requesting agency's dispatcher should monitor the radio traffic between units and then advise the control point when the patch can be deactivated.

**Note:** Interconnecting encrypted and non-encrypted channels on a gateway can compromise operations or allow sensitive information to be intercepted because it is difficult to ensure all encrypted channel users are aware of when there are interconnections to non-encrypted channels. An encrypted channel user can mistakenly believe that their communication is secure, when in fact the communication is being broadcast in the clear over a non-encrypted channel through a gateway connection. For this reason, the default policy will be that encrypted channels will not be used where non-encrypted channels are being interconnected with a gateway.

#### **4.4.6 Problem ID and Resolution**

- A. The Gateway Manager reports any problems experienced during the deployment to the Region Communications Sub-committee following the incident. Agencies using gateways may also report any problems experienced. See Appendix A for Point of Contact information for the Region Communications Sub-committee.
- B. The Region Communications Sub-committee will be responsible for ensuring effective resolution to problems that exist with interoperability resources. The Gateway Manager immediately reports any problems with activation of the interconnects to the Incident Commander and the Regional Interoperability Coordinator.

#### **4.4.7 Fixed Site Gateway Limitations**

The interoperability provided through the Gateway has the ability to link participating agencies but has the following limitations—

- Only frequencies and or channels preprogrammed into RCC or local communications consoles can be linked together

#### **4.4.8 Fixed Site Gateway Test Procedures**

To ensure that equipment components of the interoperability solution are operating properly, each agency will participate in the following testing procedure—

- A. A radio roll call will occur every Wednesday at 10:00 hours on a predetermined channel/talkgroup
- B. Each agency will enable the connectivity prior to the 10:00 hours roll call
- C. Beginning at 10:00 hours, a control point dispatch center will initiate roll call by contacting each agency by name
- D. Each agency shall respond when called
- E. Dispatch personnel shall document and maintain a check list of agency responses for each roll call
- F. After the roll call list is complete, the control point dispatcher shall attempt to contact each non-responsive agency one additional time



- G. The control point dispatcher will make an official announcement, via radio, that the test is complete
- H. Each dispatcher will deactivate the connectivity after roll call is complete
- I. Agencies that do not respond to the roll call will be contacted by the control point dispatcher by phone to attempt to identify any issues or problems that precluded their participating in the test
- J. If the issue or problem can be identified, dispatch personnel should agree on who shall take corrective action. If the issue or problem cannot be identified, the control point dispatcher shall contact the appropriate technical personnel to address the issue or problem.



## 4.5 Mobile Gateways- None in the SLV Region

## 4.6 Shared Systems

### 4.6.1 Shared System Rules of Use

- National Incident Management System (NIMS)- Use of an Incident Command System compliant with the National Incident Management System is required for use of any regional interoperability resource.
- Plain language - All Communications shall be in plain language. Radio codes, acronyms and abbreviations are to be avoided as they may cause confusion between agencies. Additionally, it should be understood that plain words such as “help”, “assistance”, “repeat” and “back-up” may have different operational meanings to different agencies. The word “Help” should not be used alone unless in the context of a life-threatening situation. Requests for assistance or backup should clarify the reason for the request.
- Unit Identification - Agency name or identifier shall precede unit identifier.

### 4.6.2 Shared System Procedures

- A. If an individual responder needs to talk to an agency with which they do not otherwise have communications, the responder notifies dispatch that they need to operate on a shared channel/talkgroup. Dispatch or the responder can determine the appropriate channel/talkgroup.
- B. For an extended incident, the dispatcher is responsible for notifying the Regional Interoperability Coordinator that an interoperability channel/talkgroup is in use.
- C. When a responder is dispatched to an incident, each agency dispatcher is responsible for notifying responders what interoperability channel(s)/talkgroup(s) is (are) being used for the incident.
- D. The Incident Commander determines when the interoperability channels/talkgroups is (are) no longer required and notifies his/her dispatch center.

### 4.6.3 Problem ID and Resolution

- A. The dispatch center having jurisdiction over the location of the incident reports any problems experienced to the Region Communications Sub-committee. See Appendix A for Point of Contact information for the Region Communications Sub-committee.
- B. The Region Communications Sub-committee will be responsible for ensuring effective resolution to problems that exist with interoperability resources.



## Section 5. Plans for Tactical Communications during an Incident

### 5.1 Event

This plan assumes an event of a magnitude that exceeds the normal day to day response capabilities of first responder agencies. The plan that has been laid out in this section addresses the need for interoperable on-scene communications in the first 12 hours of the incident response. The Regional Communications Coordinator(s) for the event shall have the responsibility, in cooperation with the incident command structure, to develop and continually update a communications plan as part of the Incident Action Plan for the event by the end of the first operational period.

Although no amount of planning can address every possible outcome during an event, a plan for interoperable communications is expected to have the following benefits:

- The development of a plan builds an understanding of what resources could be applied to a general type of incident and what limitations exist. This knowledge can be applied during events as well as in the development of requirements for future interoperability systems that may be implemented by the region.
- By establishing the planned use for interoperable communication resources, agencies can train, equip or take other measures to ensure personnel have access to the communication resources needed by their discipline.

### 5.2 Participating Functional Disciplines

In response to an event, the local and regional functional disciplines involved in the initial incident-scene response are expected to include:

- Fire
- Law Enforcement
- Emergency Medical Services
- Emergency Management
- Regional Hazmat
- County Search and Rescue
- Transportation
- Utilities
- Public Works/Road and Bridge Depts.
- County Public Health Depts.

In addition to the local agencies above, State and Federal agencies may also be involved in the initial incident-scene response. The State and Federal agencies listed below have been provided copies of this plan. These State and Federal agencies will be invited to participate in the training and exercise activities related to this plan.

- Colorado State Highway Patrol

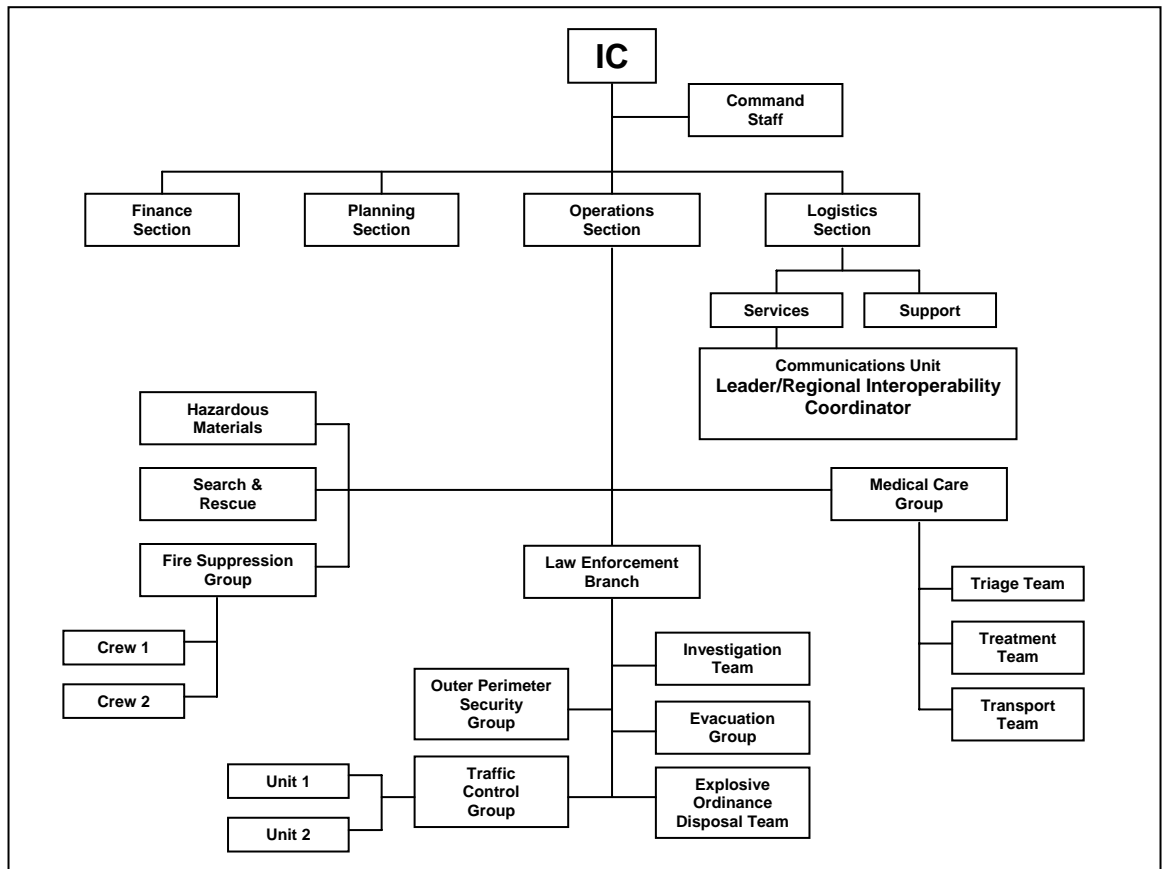


- Colorado Dept. of Transportation
- CBI
- Federal Bureau of Investigation
- San Luis Valley Regional Airport Transportation Security Administration
- Federal Forest Service Law Enforcement
- Great Sand Dunes National Park
- Bureau of Land Management
- State Forest Service

### 5.3 Incident Command Structure

Figure 5.3.1 shows a hypothetical Incident Command System structure that would be generally appropriate for the level of incident addressed by this plan.

Figure 5.3.1 Hypothetical Event ICS structure



### 5.4 Prioritizing Interoperable Communications

Because interoperable communications resources may be limited, a priority order must be established. The SLV DTR Protocol document (see Appendix I) provides first responders with an effective and efficient communication architecture to use at the beginning of an incident. As the complexity of the incident grows, so should the communications plan of the Incident Action Plan.



#### **5.4.1 Priority Users**

The incident commander will have the authority to apply resources (radios, channel assignments, etc.) as the Incident Action Plan requires. The following list should be considered as a possible priority order of uses for interoperable communications:

1. Incident Commander/Unified Command
2. Incident Command and General Staff
3. Emergency Medical Services
4. Fire Suppression
5. Law Enforcement
6. Hazardous Material Response
7. Hospital Coordination

#### **5.4.2 Priority Assignment of DTR Mutual Aid Channels**

If all applicable agencies share communications on a common channel, or if a radio cache is being deployed to support the incident, the following talk group/channels should be used unless otherwise directed by the Incident Commander.

For Digital Trunked Radios, See Regional DTR Protocols contained in: Appendix I

### **5.5 Event Interoperable Communications Requirements**

#### **5.5.1 Highest Level of Operational Command**

At the highest level of operational command, the Operations Section in this event will need interoperable communications among section members that could include Fire Suppression, Law Enforcement, Hazardous Materials Teams and Emergency Medical Services. The Region has identified these as the most critical need for interoperability because of the diversity of agencies involved.

If the Incident Commander has not already ordered deployment of a radio cache, one of the first actions by the Operations Section Chief during an event must be to ensure these resources are requested through the Logistics Section Chief.

For the Operations Section Chief and applicable Group Supervisors, Branch Directors and Unit Leaders at the highest level of operational control, Interoperable Communications will be attempted in the following order:

- A. If responders at the highest level of operational control are users of a shared system, (SLV DTR) the shared system will be used to establish interoperable communications.
- B. If responders at the highest level of operational control do not have a common shared system, but operate on the VHF/UHF or 800MHz frequency bands, use of a mutual aid channel identified in Section 4.1.1 above should be attempted to establish interoperable communications.
- C. If no other method above is available, the Operations Section will wait for the arrival of the radio cache. When the radio cache arrives, the Communications Unit Leader shall distribute radios and use the channel assigned for the highest level of operational control.



### **5.5.2 Command Staff and General Staff Communications**

In an incident, unless it is known that all responding agencies will be operating on the same shared communication system, the Incident Commander should immediately order deployment of a radio cache through dispatch. Dispatch will work with the Regional Interoperability Coordinator to activate applicable resources.

Interoperable Communications will be attempted in the following order:

- A. Collocation of all Command and General Staff at the incident command post provide the best direct communications and reduces demand on interoperability resources.
- B. If the Command Staff and General Staff are users of a shared system, the shared system will be used to establish interoperable communications
- C. If no other method of interoperability can not be established, the Command Staff and General Staff will relay communications through staff members.

### **5.5.3 Medical Care Group**

The Medical Care Group may need interoperable communications resources for directing triage, treatment and transport efforts. Interoperable Communications will be attempted in the following order:

- A. If the Medical Care Group agencies are users of a shared system, the shared system will be used to establish interoperable communications
- B. If cache radios are available for distribution, the channel assigned in section 4.1.1 above will be used for the Medical Care Group.

### **5.5.4 Fire Suppression Group**

The Fire Suppression Group may need interoperable communications resources for directing fire suppression efforts. Interoperable Communications will be attempted in the following order:

- A. If the Fire Suppression Group agencies are users of a shared system, the shared system will be used to establish interoperable communications
- B. If cache radios are available for distribution, the channel assigned in section 4.1.1 above will be used for the Fire Suppression Group.

### **5.5.5 Law Enforcement Branch**

The Law Enforcement Branch may need interoperable communications resources for directing outer perimeter security, evacuation, explosive ordinance disposal, investigations, and traffic control efforts. Interoperable Communications will be attempted in the following order:

- A. If the Law Enforcement Branch agencies are users of a shared system, the shared system will be used to establish interoperable communications
- B. If cache radios are available for distribution, the channel assigned in section 4.1.1 above will be used for the Law Enforcement Branch.



### 5.5.7 Hospital Coordination

- A. EMS transport vehicles will use the assigned regional 800 MHz channels as contained in the San Luis Valley DTR Protocols (see Appendix I) to communicate with hospitals and arrange for patient care.
- B. If the DTR system is inoperable, EMS transport vehicles will communicate with hospitals on MED 9 UHF Medical Coordination channel (463.175/468.175)

### 5.6 Regional Interoperability Coordinator/Communications Unit Leader Responsibility

This section contains a plan for tactical use of interoperability resources during an incident. This is only a plan. The Communications Unit Leader has the responsibility for assigning frequencies and equipment during an actual event, based on the circumstances, agencies involved and available resources. The Communications Unit Leader must be part of the planning process and determine the communications resources required to support the objectives and tactics of the Incident Action Plan, as it develops.

## Section 6. Regional Interoperability Coordinator/ Communications Unit Leader Training

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### 6.1 Interoperability Training Schedule

The SLV Region Communications sub-committee will meet once a year and establish the training criteria and training calendar to support the Interoperation Communication Plan. Training and exercises will be posted on the SLV RETAC website ([sanluisvalleyretac.org](http://sanluisvalleyretac.org)).

### 6.2 Certification

The San Luis Valley All-Hazards Region, using the regional credentialing systems, will provide a standard card to trained Regional Interoperability/Communications Unit Leaders indicating their level of training.

## Appendix A Governance Contacts

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The region's points of contact for governance entities as well as any individuals appointed for regional coordination of interoperability resources are:

- Jeff Babcock, Regional Representative to State Communication Committee
- Cameron Decker, Regional Representative to State Communication Committee

**STIC Plan – Prepared for  
SAHAC SAN LUIS VALLEY REGION**



Alternates are:

- Mike Norris- Saguache County Sheriff

**Table A.1:0 SLV REGION Communications Committee Members**

<b>County</b>	<b>Agency</b>	<b>Contact</b>	<b>Phone</b>	<b>E-Mail</b>
Saguache (chairperson)	Saguache SO	Mike Norris	719-655-2544	saguacheso@amigo.net
Regional Representative	Communication Officer, Alamosa CSP Regional Dispatch Center	Kenric Holman Vice Chair	589-5807	kenric_h@msn.com
Regional Representative	Communication Officer, Alamosa CSP Regional Dispatch Center	Cameron Decker	589-5807 / 480-0085	cameron.decker@cdps.state.co.us
Regional Representative	Alamosa County Nursing Service – Regional Public Health Planner	Moira Howard	589-6639	mhoward@alamosacounty.org
Rio Grande	Rio Grande County Deputy Sheriff	Steve Trujillo	657-4000	sstl835@yahoo.com
Rio Grande	Monte Vista Ambulance Service	Arlan Oakes	589-1194 (h) 85205970 (w)	oakesd@hotmail.com
Costilla	Costilla County Fire Department	Theldon Smith	379-3460	theldonsmith15@hotmail.com
Saguache	Baca Grande Ambulance	Pam Gripp	256-4171	emtadmin@bacapoa.org

<b>County</b>	<b>Agency</b>	<b>Contact</b>	<b>Phone</b>	<b>E-Mail</b>
Mineral	Mineral County Fire Department	Robert Hosselkus	658-2600 (w) 658-2329 (w) 658-2623 (h)	mincosheriff@centurytel.net
Mineral	Mineral County OEM	Bill Fairchild	658-2384 (h) 658-2600 (w)	mincosheriff@centurytel.net
Alamosa	Sergeant, Alamosa County Sheriff Office	Jim McCloskey	589-6608/588-4680	k9sgt@ctelco.net
Alamosa	Captain, Alamosa Police	Robert Jackson	589-2548/580-6009	pdsupport@cc.alamosa.co.us

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	Department			
Regional Representative	Myers Electronics	Dale Myers	588-3283	myerselectronics@yahoo.com

**Table A.1:1 SLV REGION POLICY COMMITTEE MEMBERS**

<b>County</b>	<b>Agency</b>	<b>Contact</b>	<b>Phone</b>	<b>E-Mail</b>
Rio Grande (chairperson)	Commissioner	Mr. Doug Davie	719-657-2744 719-850-2130	doug.davie@hotmail.com
Alamosa County	Commissioner	Mr. Frank Mestas	719-589-3841-W 719-589-1900-Fax	fmestas@alamosacounty.org
Saguache County	Commissioner	Mr. Joe Alexander	719-655-2231-w 719-655-2263-h 719-221-2880-cell	none
Conejos County	Commissioner	Mr. Bob Bagwell	719-376-5654-w	cocoadm@fone.net
Mineral County	Commissioner	Mr. Zeke Ward	719-658-2331-w 719-658-2425-h 719-658-2931-fax	zekeward@netzero.com
Costilla County	Commissioner	Mr. Edward Vigil	719-672-3372-w 719-588-2141-cell	edwardvigil2@centurytel.net



## Appendix B Radio Caches

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Detailed information on all radio caches available for use within the region are listed in subsequent pages of Appendix B.

The table below lists the county, agency, quantity of gateways and type of each radio cache. The appendix section corresponding to each gateway is also listed.

**Table B.1 – Index of Radio Caches in the San Luis Valley Region**

Appendix	Responsible Agency	Cache Name	Quantity	Type
B	SLV RETAC	VHF-RETAC	20	



## Appendix B.1: No county 800MHz Radio Cache at this time.

### B.1.1 Equipment Location

### B.1.2 Responsible Agency

### B.1.3 Service Area

This radio caches is available for deployment throughout

### B.1.4 Cache Description

The following channels are programmed into all radios in this radio cache:

Channel Number	Frequency or System/Talkgroup	Name	Description



## Appendix B.2: VHF Radio Cache

### B.2.1 Equipment Location

San Luis Valley RETAC Office, 8900 Independence Way, Alamosa, Colo

### B.2.2 Responsible Agency

San Luis Valley RETAC Coordinator

### B.2.3 Service Area

Region Wide

### B.2.4 Cache Description

The following channels are programmed into all radios in this radio cache:

Channel Number	Frequency	Name	Description
	155.475	NLEEC	National Law Enforcement Emergency Channel
	154.905	State 3	Colorado State Patrol Statewide

## Appendix B.3: No UHF Cache in Region at this time.

### B.3.1 Equipment Location

### B.3.2 Responsible Agency

### B.3.3 Service Area

T

### B.3.4 Cache Description

The following channels are programmed into all radios in this radio cache:

Channel Number	Frequency or System/Talkgroup	Name	Description




## Appendix C Shared Channels

Detailed information on all shared channels available for use within the region is listed in subsequent pages of Appendix C.

**Table C.1 – Index of Emergency and Mutual-Aid Frequencies**

App.	Primary Use	Name	Description	Frequency	CTCSS
C.1	Emergency Management				
C.2		VH-LMA U-LMA	Law Mutual Aid VHF High Law Mutual Aid UHF	155.475/155.475 460.275/465.275	None None None
C.3	Fire Emergency	FG-Red FG-White FG-Blue	Fire Ground Red Fire Ground White Fire Groud Blue	154.265/154.265 154.280/154.280 154.295/154.295	None None None
C.4	Law Enforcement InterCity	LEIC	Law Enforcement InterCity	155.370/155.370	None
C.5	EMS Medical Coordination	V-EMS U-EMS U-EMS	VHF Medical Coordination UHF Medical Coordination UHF Medical Coordination	155.340/155.340 462.950/462.950 462.950/467.950	None
C.6	National Interoperability	I-CALL I-TAC1 I-TAC2 I-TAC3 I-TAC4 I-TAC5	NPSPAC Calling Channel NPSPAC Tactical 1 NPSPAC Tactical 2 NPSPAC Tactical 3 NPSPAC Tactical 4	866.0125/821.0125 866.5125/821.5125 867.0125/822.0125 867.5125/822.5125 868.0125/823.0125	156.7 156.7 156.7 156.7 156.7

### Appendix C.1: Law Enforcement Emergency

#### C.1.1 Frequencies

Name	Description	Frequency	CTCSS

#### C.1.2 Primary Use

#### C.1.3 Notes

None



## Appendix C.2: Law Enforcement Emergency Channels

### C.2.1 Frequencies

Name	Description	Frequency	CTCSS
NLEEC	Law Mutual Aid VHF High	155.475/155.475	None None

### C.2.2 Primary Use

The Law Enforcement Emergency Channels (45.86, 154.950, or 460/465.275 MHz) are assigned for base station and mobile radio use under the following circumstances:

1. During emergency situations in which a vehicle is out of its prime area and unable to access the local dispatch center using the Primary Dispatch Communications channel/talkgroup of that area (mutual-aid communications);
2. In isolated critical situations during which prolonged use of the Primary Dispatch Communications channel/talkgroup would not be feasible due to other primary dispatch communications traffic;
3. When a common emergency channel is required for base/mobile and mobile/mobile communications among agencies in a region or in an adjacent region.

### C.2.3 Notes

In addition to the above uses, the Law Enforcement Emergency Channels may be used in the following situations:

- Multi-agency involvement in an emergency situation such as riots, civil unrest, hot pursuits, etc. for coordination, command and control via a single dispatch center.
- Individual agency loss of the primary dispatch channel.
- Limited portable radio use for surveillance and stake-out operations such that it does not cause interference to other agencies.
- Tactical communications in the event secondary use of a channel compromises its primary function for an extended duration.

## Appendix C.3: Fire Emergency

### C.3.1 Frequencies

Name	Description	Frequency	CTCSS
FG-Red	Fire Ground Red	154.265/154.265	None
FG-White	Fire Ground White	154.280/154.280	None
FG-Blue	Fire Ground Blue	154.295/154.295	None

### C.3.2 Primary Use

The FCC has set aside these frequencies as national Fire Mutual Aid frequencies. These frequencies are used for Fire Department operations, search and rescue, evacuation, and to facilitate alerting and warning the general public. These are tactical frequencies that can be used in large mutual aid incidents as well as small single agency incidents.

### C.3.3 Notes



## Appendix C.5: EMS Medical Coordination Channels

### C.5.1 Frequencies

Name	Description	Frequency	CTCSS
V-EMS	VHF Medical Coordination	155.340/155.34	None
EMS- MED 9	UHF Medical Coordination	462.950/462.950	94.8
U-EMS	Saguache Peak	462.950/467.950	88.5
	Pooltable		94.8
	San Luis		136.5
	San Antonio Mountain		141.3

### C.5.2 Primary Use

These channels are used for Statewide Medical Coordination (SMC) for permitted vehicles during times the vehicles are used outside their normal operating area, and other medical channels are not available. These channels are intended to provide a means for every licensed EMS transport, regardless of other frequencies radio systems employed within their primary region, to communicate with a hospital in an adjacent city or county if necessary.

## Appendix C.6: NPSPAC Channels

### C.6.1 Frequencies

Name	Description	Frequency	CTCSS
I-CALL	NPSPAC Calling Channel	866.0125/821.0125	156.7
I-TAC1	NPSPAC Tactical 1	866.5125/821.5125	156.7
I-TAC2	NPSPAC Tactical 2	867.0125/822.0125	156.7
I-TAC3	NPSPAC Tactical 3	867.5125/822.5125	156.7
I-TAC4	NPSPAC Tactical 4	868.0125/823.0125	156.7
I-TAC5	NPSPAC Tactical 5	868.0125/824.0125	156.7

### C.6.2 Primary Use

The FCC has established the five NPSPAC channels nationwide to be available for mutual aid operations by any public safety agencies, including federal agencies participating in the operations. The channels include one channel to serve as a “calling channel” to be used for coordinating requests for service. The remaining four channels are designated for “tactical” use between agencies participating in mutual aid operations.



## Appendix D Gateways

**NOTE: THERE ARE NO GATEWAY SYSTEMS DEPLOYED OR IN OPERATION WITHIN THE SAN LUIS VALLEY REGION AT THIS TIME. Appendix D left as is for future reference.**

Detailed information on all gateways available for use within the region is listed in subsequent pages of Appendix D.

The table below lists the county, agency, type of gateway, quantity of gateways and an identification of whether the gateway is located at a fixed site or is mobile. The appendix section corresponding to each gateway is also listed.

**Table D.1 – Index of Gateway Devices in the Urban Area**

App.	County	Agency	Type	Quantity	Fixed/Mobile

### Appendix D.1:

**NOTE: THERE ARE NO GATEWAY SYSTEMS DEPLOYED OR IN OPERATION WITHIN THE SAN LUIS VALLEY REGION AT THIS TIME.**

#### D.1.1 Equipment Location

#### D.1.2 Responsible Agency

#### D.1.3 Service Area

#### D.1.4 System Type and Capacity

#### D.1.5 Participating Agencies

Agencies and channels supported on the particular gateway system are:

Agency	Channel Designation
None at this time	
Unit is in storage	



## Appendix D.2: Gateway (Mobile)

**NOTE: THERE ARE NO GATEWAY SYSTEMS DEPLOYED OR IN OPERATION WITHIN THE SAN LUIS VALLEY REGION AT THIS TIME.**

### D.2.1 Equipment Location

### D.2.2 Responsible Agency

### D.2.3 Service Area

This mobile gateway system is available for deployment throughout REGION.

### D.2.4 System Type and Capacity

This is a mobile gateway system that can support up to 12 active channels involved in up to 7 interconnects.

### D.2.5 Participating Agencies

Agencies and channels supported on the particular gateway system are:

Agency or System	Frequency or System/Talkgroup	Channel Name



## Appendix D.3: (Mobile)

**NOTE: THERE ARE NO GATEWAY SYSTEMS DEPLOYED OR IN OPERATION WITHIN THE SAN LUIS VALLEY REGION AT THIS TIME.**

### D.3.1 Equipment Location

### D.3.2 Responsible Agency

### D.3.3 Service Area

This mobile gateway system is available for deployment throughout REGION.

### D.3.4 System Type and Capacity

This is a mobile gateway system that can support up to 12 active channels involved in up to 7 interconnects.

### D.3.5 Participating Agencies

Agencies and channels supported on the particular gateway system are:

Agency or System	Frequency or System/Talkgroup	Channel Name



## Appendix E Shared Systems

Appendix E will contain information on all shared systems within the region. At the current time, the San Luis Valley Regional digital trunked radio system is the only region-wide, multi-jurisdiction, interoperable shared system.

### Appendix E.1: SLV Regional Trunked Radio System

#### E.1.1 System Designation

San Luis Valley Digital Trunked Radio System

#### E.1.2 System Type

Motorola SmartZone, V6.5

#### E.1.3 Responsible Agencies (dispatch centers)

Name	Location	Responsible Agency
Rio Grande Communications Center	925 Cherry St. Del Norte, Colo	Rio Grande County Sheriff Dept.
Saguache County Communication Center	530 5 <sup>th</sup> Avenue, Saguache, Colo	Saguache County Sheriff Dept.
City of Center Communication Center, (designated as the backup E-911 PSAP)	671 E. 3 <sup>rd</sup> , Center, Colo.	Center Police Department
City of Monte Vista Communications Center	720 First Avenue, Monte Vista, Colo.	Monte Vista Police Department
Costilla County Communications Center	103 Gasper St. San Luis, Colo.	Costilla County Sheriff's Dept.
Mineral County Communications Center	144 Creede St. Creede, Colorado	Mineral County Sheriff's Dept.

#### E.1.4 Service Area

This shared system provides radio service throughout the San Luis Valley, with the temporary exception of areas within Mineral County.



**E.1.6 Shared Frequencies or Talk Groups**

Table E3.1 lists all the frequencies or talk groups on the shared system that have been established for interagency communication.

<b>AGENCY</b>	<b>TALK GROUP ALIAS</b>	<b>PRIMARY USERS</b>	<b>OTHER USER AGENCIES</b>
OIT	OIT	PUBLIC SAFETY-OFFICER IN TROUBLE	CSP Dispatched Law Enf ONLY
SEARCH & RESCUE	CSRB	SEARCH & RESCUE- STATE WIDE	
SW NET	SW NET	CONSOLE TO CONSOLE SW	
RETAC SW	RETAC SW	SOUTHWEST RETAC COORDINATOR	
RETAC SLVLY	RETACSLV	SAN LUIS VALLEY RETAC COORDINATOR	
SANL OPS	SANLOPS	SAN LUIS PARK OPS	
ARCC 1	ARCC 1	ALAMOSA REGIONAL COMM CENTER	ALL STATE AGENCIES
ARCC 2	ARCC 2	ALAMOSA REGIONAL COMM CENTER	ALAMOSA PD
ARCC 3	ARCC 3	ALAMOSA REGIONAL COMM CENTER	ALA SHERIFF, DNPD, SOFORK PD
ARCC 4	ARCC 4	ALAMOSA REGIONAL COMM CENTER	ALL CONEJOS CO, LAW ENF
ARCC 5	ARCC 5	ALAMOSA REGIONAL COMM CENTER	ALL ALA, CONEJOS FIRE, EMS, Haz Mat
ARCC 6	ARCC 6	ALAMOSA REGIONAL COMM CENTER	VACANT
ALA MAC	ALA MAC	ALAMOSA COUNTY WIDE MAC	MUTUAL AID CHANNEL Alamosa Co.
SLV EMS E	EMS E	SLV EMS EAST DISPATCH	EMS Ala.-Con-Cost County Amb Ser
SLV EMS E TAC	EMS E T	SLV EMS EAST TAC	Ala-Con-Cost County EMS TAC
SLV EMS W	EMS W	SLV EMS WEST	Min-Rio-Sag County EMS AMBULANCE
SLV EMS W TAC	EMS W T	SLV EMS WEST TAC	Min-Rio-Sag County EMS TAC
ALA F TAC1	ACWFDT	ALAMOSA COUNTY WIDE FIRE TAC	Ala-Mosca Hooper Fire TAC's
ALA F TAC2	MHFTAC	MOSCA/HOOPER FIRE TAC	Ala-Mosca Hooper Fire TAC's
COS MAC	COS MAC	COSTILLA COUNTY WIDE MAC	Costilla County Mutual Aid Ch
COS CW FIRE	COSFD	COSTILLA COUNTY WIDE FIRE	
COS FD TAC	COSFDT	COSTILLA COUNTY WIDE FIRE TAC	
COS LAW	COSLAW	COSTILLA COUNTY AREA LAW DISPATCH	
BLA PD TAC	BPD TAC	BLANCA PD TAC	
SL TAC	SLM TAC	SAN LUIS MARSHAL TAC	
CON MAC	CON MAC	CONEJOS COUNTY WIDE MAC	
CON FIRE	CONFD	CONEJOS COUNTY WIDE FIRE	
ANT FD TAC	ANTFD TAC	ANTONITO FIRE TAC	
FCFD TAC	FCFD TAC	FOX CREEK FIRE TAC	
CARFD TAC	CARFDTAC	CARMELL TAC	
CAPFD TAC	CAPFDTAC	CAPULIN FIRE TAC	
LJFD TAC	LJFD TAC	LA JARA FIRE TAC	
SANFD TAC	SANFDTAC	SANFORD FIRE TAC	
MANFD TAC	MANFDTAC	MANASSA FIRE TAC	
CON SO TAC	CONSOTAC	CONEJOS SO TAC	
SAN PD TAC	SPD TAC	SANFORD PD TAC	
LJ PD TAC	LJPD TAC	LA JARA PD TAC	

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MAN PD TAC	MPD TAC	MANASSA PD TAC	
ANT PD TAC	ANTPD TAC	ANTONITO PD TAC	
CON FD TAC	CONFD TAC	CONEJOS FIRE TAC	
MIN MAC	MINMAC	MINERAL COUNTY WIDE MAC	
MIN FIRE	MINFD	MINERAL COUNTY WIDE FIRE DISPATCH	
MIN FIRE TAC	MINFD TAC	MINERAL FIRE TAC	
MIN LAW	MIN LAW	MINERAL COUNTY AREA LAW DISPATCH	
MIN SO TAC	MINSO TAC	MINERAL COUNTY SO TAC	
RG MAC	RG MAC	RIO GRANDE COUNTY MAC	
RG FIRE	RGFD	RIO GRANDE COUNTY WIDE FIRE DISPATCH	
MVFD TAC	MVFD TAC	MONTE VISTA FD TAC	
DNFD TAC	DNFD TAC	DEL NORTE FD TAC	
SFFD TAC	SFFD TAC	SOUTH FORK FD TAC	
RGSO	RGSO	RIO GRANDE COUNTY AREA LAW DISPATCH	
RGSO TAC	RGSO TAC	RIO GRANDE SO TAC	
MVPD	MVPD	MONTE VISTA PD DISPATCH	
MVPD TAC	MVPD TAC	MONTE VISTA PD TAC	
ARCC3	ARCC3	SOUTH FORK/DEL NORTE POLICE DISPATCH	
SFPD TAC	SFPD TAC	SOUTH FORK PD TAC	
DNPD TAC	DNPD TAC	DEL NORTE PD TAC	
SAG MAC	SAG MAC	SAGUACHE COUNTY WIDE MAC	
BGFD TAC	BGFD TAC	BACA GRANDE FIRE TAC	
SAG FIRE	SAGFD	SAGUACHE COUNTY WIDE FIRE DISPATCH	
SAGFD TAC	SAGFD TAC	SAGUACHE FIRE TAC	
CENFD TAC	CENFD TAC	CENTER FIRE TAC	
SAG LAW	SAG LAW	SAGUACHE COUNTY WIDE AREA LAW	
SAGSO TAC	SAGSOTAC	SAGUACHE SO TAC	
CEN PD	CENPD	CENTER PD DISPATCH	
CENPD TAC	CENPD TAC	CENTER PD TAC	
CSP SW	CSP SW	CSP STATE WIDE	
RIOHSP	RIOHSP	RIO GRANDE HOSPITAL	
SLV MED	SLV MED	SAN LUIS VALLEY REGIONAL MED CENTER	
CON HSP	CON HSP	CONEJOS COUNTY HOSP	
RETAC EMS	RETACEMS	STATEWIDE EMS MUTUAL AID	
RETAC ER	RETAC ER	STATEWIDE ER MUTUAL AID	
CHD SLV	CHD SLV	COUNTY HEALTH SAN LUIS VALLEY	
CHD SW	CHD SW	COUNTY HEALTH SOUTHWEST	
HWY 7	HWY 7	DOW - SAN LUIS VALLEY	
SLV HM	SLV HM	SAN LUIS VALLEY HAZMAT	Haz Mat TAC
CSP CREED	CSP CREED	CONVENTIONAL 800 ( 822.825 - 867.825, PL 156.7)	
SAG AMB	SAG AMB	SAGUACHE AMB DISPATCH	
ROFTAC	ROFTAC	ROMERO FIRE TAC	
DOW 17	DOW 17	DOW WEST SLOPE	
DOW SW	DOW SW	DOW SW	
OEM SLV	OEM SLV	OEM SAN LUIS VALLEY	Emergency Management

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ARCC 1	CSP 5B USED BY ALAMOSA PD		
ARCC 2			
ARCC 3	USED BY ALAMOSA SO, SOUTH FORK PD, DEL NORTE PD, SAN DUNES		
ARCC 4	USED BY CONEJOS SO, LA JARA PD, SANFORD PD, ANTONITO PD		
ARCC 5	USED BY FIRE & EMS, NOT YET DETERMINED	&EMS Alamosa and Conejos County Agencies	
ARCC 6	NOT YET ASSIGNED, FUTURE GROWTH		
ITAC 1	ONLY ITAC IN SLV, LOCATED IN ALAMOSA		
STAC (ITAC5)	Located in San Luis		
SITES PER COUNTY			
SAGAUCHE CTY	METHODIST, SITE 50		
SAGAUCHE CTY	SAGAUCHE PEAK, SITE 54		
MINERAL CTY	WOLF CREEK PASS PROPOSED DTR SITE		
RIO GRANDE CTY	POOLTABLE MTN, SITE 42		
ALAMOSA CTY	ALAMOSA, SITE 52		
RIO ARRIBA, NM	SAN ANTONIO PEAK, SITE 45		
HUERFANO CTY	LA VETA 32		
COSTILLA COUNTY	SAN LUIS 64		
MONTE VISTA CITY	MONTE VISTA 61		



## Appendix F Communications Center Managers/Contacts

This appendix lists the contact information and discipline of all certified Communications Unit Leaders.

**Table F.1: Law Enforcement Communications Center Contacts/Managers**

County	Agency	Contact	Email	Phone
Alamosa/ Conejos	Colorado State Patrol 1205 West Avenue, Alamosa, Co 81101	Pam Stewart	pamela.stewart@cdps.state. co.us	719-589-5807
Rio Grande County	925 Cherry St. Del Norte, Colo	Sheriff Brian Norton	rgso@amigo.net	719-657-4000
Saguache	530 5 <sup>th</sup> Street, Saguache, Colo 81149	Sheriff Mike Norris	sagso@centurytel.net	719-655-2544
Center Police Dept.	671 E. 3 <sup>rd</sup> , Center, Colo.	Chief Leroy Torrez		719-754-3141
Rio Grande/Monte Vista Police Dept.	720 First Avenue, Monte Vista, Colo.	Chief Mike Gallegos		719-852-5111
Mineral County	1291 North Main Creede, CO 81130	Sheriff Phillip Leggitt		719-658-2600



## Appendix G Regional Strategic Planning

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Regional Strategic Plan information is placed here. Regional Strategic planning **MUST** include planning steps to move to total interoperability.

The San Luis Valley Regions has moved to a system, Digital Trunked Radio, which gives all first responders interoperability. The Region is at level 5 of the SAFECOM continuum for interoperability.

# SAN LUIS VALLEY Regional Strategic Communications Plan

*Alamosa, Conejos, Saguache,  
Mineral, Costilla and Rio Grande  
Counties*

*July 14<sup>th</sup> 2005*



## Overview

The regional strategy for developing a plan of expanded communications and interoperability is founded on a commitment to partnerships. This partnership should not only address voice communications, but also data, video and redundancy of systems. Only through strong local public safety, regional, and State of Colorado partnerships will this vision become possible. State agencies, private industry and local public safety will all play significant roles in our regional strategic future. Strategic planning should be based on and driven primarily by local/regional goals and needs. Although State and private industry needs are critical considerations, the plan should be weighted towards the local / regional issues. As needs, requirements and technology continue to evolve, this plan should be regularly modified to reflect these changes.

This partnership was established many years ago, however with this collaborative strategic planning effort it was emphasized that our relationships must be maintained to achieve operational advantages in the future. Even the largest agencies can no longer afford comprehensive communication solutions alone. By making significant, coordinated investments in shared public safety radio communication systems both the unique, as well as the common requirements of all six counties will be met.

# San Luis Valley Communication Planning Committee

## Position Statement Regarding DTR

It is the position of the SLV All Hazards Advisory Counsel that local public safety communications be managed at the local level, with support from the State and federal levels. The region realized the need for a truly interoperable communication system giving local, state and federal agencies the enhanced communication capabilities in order to prevent, respond to and recover from an all hazard events.

While recognizing the many benefits, advantages and limitation of digital communications technology, it was determined that DTR was the best system to provide the interoperability that was needed to improve public safety communications within the region.



DTR will at some point in the future provide the majority of our communication needs. There are currently certain pitfalls with this technology that must be addressed prior to full implementation being achieved.

### **Critical Success Factors**

There are several factors critical to the success of the strategic vision outlined in the report. To ensure success, the Region:

- A. Conducted a regional, communications needs assessment. This plan is based on and driven by local/regional needs and goals.
- B. Expand to a comprehensive communications plan, which addresses the following:
  - 1. Commit to Long-Term Interagency Participation
- C. Establish Long-Term Funding Options
  - 1. Update Operational Processes and Procedures
  - 2. Continue Operational Autonomy and Flexibility.
  - 3. Develop long term solutions in regional, statewide and federal interoperability.
  - 4. Work Towards a second Microwave System path to zone controllers.
  - 5. Develop a regional tactical/operational communications plan. (TIC)

### **Regional Strategic Goals**

The San Luis Valley Communications Committee (SLVCC) has identified the following goals for the SLVCC Communications Plan. In addition to previously listed success factors, these goals will incorporate existing infrastructure as well as the state-wide digital trunked radio system. (DTR)

- 1) Integrate the statewide DTR system into the public safety communications centers within the region.
- 2) Work towards the goal of tying all six counties together via microwave in support of expanded radio communications and eventual data. This will include expanding DTR functionally within the region by strategically adding DTR sites that benefit the individual counties emergency communications needs.
- 5) Encourage a regional communications center resource mutual aid plan.



- 6) Establish a regional base of public awareness and local government administrative training that creates awareness and understanding of the 911 system, and the needs of communications centers and radio systems.
- 7) Establish a regional communications center auxiliary / back-up plan that allows for continued operation of critical communications center functions, including radio, phone and 911 systems in case of evacuation, or major disruption of technical service.

In addition to the Strategic Goals listed above, the SLVCC identified and adopted the following strategies and goals as a vehicle to complete this communications plan:

- a) Interoperability – meaning the ability to **seamlessly** communicate with any/all agencies in the region regardless of technology.
- b) Communications systems that will serve local needs in day to day operations, as well as being capable of accommodating larger-scale incidents.
- c) Through appropriate technological studies and needs assessments, maximize communications technology and communications dollars – getting the best system and coverage at the best price.
- d) Collaborate with the State of Colorado Division of Information Technology in determining the optimal DTR repeater sites, time-line strategies, priorities and methods of cross connecting the various communications technologies.
- e) Include the **local** Federal offices (specifically USFS/BLM and NPS) in the discussion process, to ensure that our ability to communicate with them is not impinged. It is critical that communications with these agencies be at least maintained, and ideally enhanced by this plan.
- f) Completion of this planning document by September 2005, in order that it may be included in the Statewide plan. The State of Colorado Homeland Security Strategy, Objective 4.2 lists December 2005 as the completion date for the State plan.
- g) For a variety of reasons, it will be necessary to maintain dual systems, VHF and DTR, in the slv Region. First, continuity of the existing system, as transition is made to DTR where appropriate. Second, the extreme geographical variations and financial capabilities with-in the SLV Region necessitate that some areas might best be served by keeping VHF, while others move towards DTR. Third, and perhaps most important, maintaining dual systems ensures interoperability and redundancy for both short and long term. It will be left up to the FCC license holder to determine at which point is it no longer feasible to maintain the VHF radio system.
- h) Due to the inability of the DTR system to page responders a SLV regional paging system using UHF will be developed.
- i) Ensuring first responder and citizen safety is the primary and over-riding goal of this plan. (emphasis added)**



## Action Plan

1. Using Homeland Security Grants to purchase needed infrastructure upgrades and to acquire needed subscriber units. As a region, move decisively and responsibly to begin the implementation of a shared, regional and statewide public safety voice radio system.
2. The SLV region should also look for other funding sources to complement the Homeland Security funding. CWIN and E-911 funds should be requested when possible to enhance the regional communications system.
3. The San Luis Valley Region, and its member Counties and agencies should maintain membership / participation in Combined Communications Network of Colorado (CCNC).
4. All agencies using the DTR system will abide by all rules, regulations, and policies of CCNC

**Conclusion:** The San Luis Valley Region will continue to work towards a true interoperable communications system to serve the emergency response community as well as the citizens and visitors of the region



## Appendix H: Definitions and Terms

700 Megahertz	A new public safety frequency band for voice and data including wideband data channels. Channel between 764-806 Megahertz.
800 Megahertz	The frequency band where public safety trunked systems operate. The channels between 806 and 869 Megahertz.
Agency	Lowest level of structure within the member structure of CCNC. Each agency must sign a Participation Agreement. Examples include fire department or police department.
Alias	Proper names representing a Unit ID example “?PD Smith”or “?FD Eng32”.
All Call	Console feature which allows dispatcher or supervisor to communicate to all system subscribers at one time. Used for major traumas or emergencies.
Amplifier	A device for obtaining an increase in voltage, current, or power.
Amplitude	The maximum departure of the value of an alternating current or radio wave from the average value.
Analog	A signal that may vary continuously over a specific range of values.
Announcement Group	This is the same as All Call above.
Antenna	A device (usually metallic) for radiating or receiving radio waves.
Antenna Gain	The effectiveness of a directional antenna expressed as the ratio in decibels of standard antenna input power to the directional antenna input power that will produce the same field strength in the desired direction.
APCO	Associated Public Safety Communications Officials, Inc. An international professional organization with members from federal, state, local government and equipment vendors in all aspects of public safety communications.
Automatic Vehicular Location (AVL)	Sub-system which interfaces with radio system to communicate actual location of a vehicle in a pre-mapped geographic grid via RF.
Band	A well-defined range of wavelengths or frequencies.
Bandwidth	The range within a band of frequencies. A measure of the amount of information that can flow through a given point at any given time.
Baud	The rate at which data is transmitted.
BDA	Bi-directional amplifier, a device that is used to extend your coverage area.
Bit	Abbreviation for binary digit (either a 0 or a 1), the basic unit for storing data in a computer.
BSI	Base Station Identifier. The BSI, which usually operates at the lowest frequency, is the Morse Code identification that automatically occurs at regular intervals from one of the trunked repeaters.
CAD	Computer Aided Dispatch. The current convention in public safety radio communications dictates use of computers in order to answer requests for emergency service more efficiently.



CAI	Common Air Interface. A part of the APCO Project 25 standards that define the basic structure for the equipment including, channel access method, data rate, spectrum efficiency and vocoder.
Call Alert	The ability of a dispatcher to selectively page an individual unit.
Call Queuing	When all channels on the system are busy, the call request is held in a first-in-first-out queue. The caller and all members of the groups are notified that a call request has been queued. Upon channel assignment, the caller is alerted and is allowed to proceed with push-to-talk (PTT).
Call Retry	Feature which is used by subscriber when unsuccessful in acquiring a requested channel. The subscriber will continue to request a channel until successful or has attempted 8 times. This is not apparent to the subscriber operator.
Cavity Filter	A device used to shield the receiver from the transmitter and to form a circuit called a duplexer.
CCIC	Colorado Crime Information Computer
CCNC	Consolidated Communications Network of Colorado
Channel	A band of frequencies of sufficient width to allow a single communication.
Channel Access Time	The time between depression of the PTT switch by the subscriber operator and the presence of audio at the receiving subscribers. Fast access time contributes to system efficiency.
Channel Drop Time	The time between subscriber un-key and when the channel is actually available for another call. Fast drop time contributes to system efficiency.
Combiner	A device used to combine the output signals from a number of transmitters connected to the same antenna.
Console	Equipment in dispatch center tailored to dispatcher needs. Single and multi talkgroup/channel configurations available.
Control Channel	This is the channel of the system upon which outbound system updates and responses to service requests occurs; and it is the conduit for all interactions to gain access to trunking resources by subscriber units.
Conventional	Assigning a specific channel/frequency for a specific dedicated use. A non-trunked channel.
Coverage	The amount or percentage of area reached by a communications medium.
Cycle	One complete performance of a vibration, electrical oscillation, current alternation, or other periodic process.
Digital	Encoding analog information into a code made up of 0's and 1's. Also Slang term for garbled audio in a digital system.
Digitization	The conversion of continuous analog waveform to binary digital data. See vocoder.
Dipole	A radio antenna consisting of two horizontal rods in line with each other, with their ends slightly separated.
Dispatch Point	Location where information is relayed to a mobile unit. Normal operating mode of the system. Communications are limited to single group and dispatcher. All in group hear only own group and dispatcher is communicating to single group.
Dynamic Regrouping	The ability to change a subscriber unit's active talkgroup over-the-air while the subscriber is operating in the field.



Dynamic Site Assignment	Allows a channel assignment only at sites necessary to reach all active talkgroup members.
Effective Radiated Power	A term for describing subscriber power levels.
Emergency Alarm	Data signal transmitted over a control channel to allow a dispatcher to be notified of emergency conditions.
Emergency Button	Emergency buttons are available on every subscriber. When depressed, the available channel is assigned to the user - highest priority is assigned to an emergency user. Emergency indicators are lit on user group radios if programmed.
Encryption	Digitalization and scrambling of the voice signal to prevent unauthorized monitoring of the message over the airwaves.
Ethernet	A protocol used to develop a Local Area Network (LAN) of PC's.
Fail Soft	This is an automatic fall back mode of communication offered in the event that the trunking central controller fails, all control channels fail, or failure of all voice channels. The repeaters independently enter the fail soft mode when the central zone controller no longer controls them; this is a form of carrier squelch community repeater operation.
Fault Tolerant Architecture	A design and implementation philosophy that permits a system to continue operating in the event of failure of major components.
FCC	Federal Communications Commission.
FDMA	Frequency Division Multiple Access. A method for improving spectrum efficiency by splitting an existing channel into 2 or more separate channels based on frequency usage.
FIFO	First In, First Out of Queue. Based upon priority. In the case of a busy trunked system, individual requests for service will be handled in a FIFO manner.
Firmware	Hardware component, such as EEPROM's, which are programmed to contain software-like instructions are commonly referred to as Firmware.
Group	Combination of subscriber users which have been linked together for communications. May be system entity. May be defined from the system manager position or dynamically reconfigured as needed.
Guard Band/Channel	A nonoverlapping space between radio channels used to minimize interference.
Hang Time	The time a channel remains keyed after release of the PTT.
Hertz	Hz. Abbreviation for cycles per second.
Historical Reporting	A function performed by the zone controller. Records each transmission id and group as well as time of day and duration. Is sent to system manager terminal for data management.
IMBE	Improved Multi-Band Excitation. A method use to change an analog signal to a digital signal. Vocoding
Infrastructure	The underlying permanent installations required for radio communications. Repeaters, microwave and site equipment.
Intellisite Repeater	ISR. Trunked repeater with computer capability to perform trunking functions.
Interference	Confusion of received radio signals due to stray or undesired signals. Can cause distorted audio.



Master Site	This term applies to the primary equipment site of a trunked simulcast system where all audio processing occurs. RF channel resource management also take place here; the Central Site Controller (CSC) in the Prime Site controls the Remote Site Controller (RESC) in the Remote Site with a data link message which is usually sent via microwave (should simulcast be implemented). Location where the zone controller and related networking equipment reside
MDT, MDC Data Terminals	Terminals which support the transmission of data via radio signals. Include a display and keyboard.
Message Trunking	The working channel remains assigned to a call for the duration of the group transmission. When the caller unkeys, the channel remains active until the group conversation is completed or the channels hang time is reached. The channel, is not available for reassignment until the group conversation is done or the channel times out.
Modem	An acronym for modulator/demodulator, which is a device that translates digital signals coming from your computer into analog signals that can be transmitted over standard telephone lines. The modem also translates the analog signal back into a digital signal that your computer can understand.
Multi-Select	A feature available to console dispatcher. Two or more groups are simultaneously selected for the same transmission from the dispatcher - but remain separate groups. Response from radio users is by group and only members of each unique group are able to hear the response.
Multisite	A network of multiple sites in a system.
NCIC	National Crime Information Computer.
Noise	An unwanted signal or disturbance (e.g., static) in a radio communications system.
NPSPAC	National Public Safety Planning Advisory Committee that developed a plan for use of 821-824 and 866-869 MHz portion of band. Included in the plan is a channelization scheme.
Omnidirectional Patch	Receiving or sending radio waves equally well in all directions. This is a form of group regrouping which the joined groups are allowed to carry on normal message trunking operations between and among all the separate member groups of the call, upon a single channel resource. A feature which allows a console operator to connect a talkgroup(s) to a conventional group or another system or system resources.
Preferred Site Operation	Determines which site a subscriber unit wants to be on when there are overlapping sites.
Priority	Preassigned levels (up to 10) which determine the order in which users are assigned channels on a system. Emergency, if used, is the highest level of priority.
Priority Scan	Operation is determined by mode of operation. In conventional mode, system operates by sampling channels for activity and opening squelch to receive messages. In trunked mode, the radio may receive audio for the groups programmed in the scan list (up to 10)
Propagation	The action of traveling and spreading through space, in reference to wave energy.



PTT	This acronym is short for "Push to Talk".
Rebanding	Moving of frequencies within the same band.
Receiver	The portion of a subscriber unit that converts the radio waves into audible signals.
Refarming	An administrative process being conducted by the FCC to reduce channel bandwidths and, as a result, promote spectrum efficiency.
Remote Site	In a simulcast system, the remote site repeater is configured the same as that of the prime site. The main difference between prime and remote sites is the fact that the repeater site is slaved to the prime site.
Repeater	A transmitter and a receiver operating on different frequencies and often connected to a common antenna. Mobile Relay
Selective (Radio) Inhibit	An important feature to public safety users which allows a operator to instantly and effectively "put to sleep" a mobile or portable unit in the field. Lost or stolen radios, over which sensitive communications could be heard, can be effectively silenced permanently by the operator. The target radio must be turned on and within system range in order for this feature to be effective.
Simplex	Transmitting and receiving on the same frequency. Direct radio to radio communications. Also known as Direct or Talkaround.
Simulcast	A wide area coverage system configuration which makes use of simultaneous transmission of the same information upon the same frequencies throughout a large coverage area; parameters of the transmitted information is matched for each repeater of a given frequency.
Site Controller	Computer system located at the site which controls all system activity, channel assignments, logging, supports test and alarm unit, and communicates to master site via dedicated T-1 line.
Skip	The phenomenon by which a radio wave reflects from the ionosphere during the height of the sunspot cycle, often resulting in severe interference problems.
Smartzone	Trunking system using multiple sites with variable number of repeaters. Currently what CCNC is using.
SMR	Special Mobile Radio. FCC classification used by entrepreneurial operators of 700/800 MHz trunked systems that service the business and industrial markets. Nextel uses.
Spectrum	The range of electromagnetic signals in which radio transmission and detection techniques may be used.
Standalone Repeater	Base station designed to cover one geographical area with one frequency pair.
Status Messages	Use to communicate without voice to users or dispatchers.
Storm Plan	A contingency plan that may be used by trunked systems for special situations, like natural disasters. This feature allows the user to preset dynamic regrouping parameters for radios. By having this plan available to the system manger and terminals, emergency situations are more likely to be handled in a quicker and more logical manner.
Subscriber ID	Distinct number assigned to each subscriber unit allowing the subscriber unit to operate on the system. Also known as Individual ID or Radio ID. The Subscriber ID is transmitted at the beginning and end of each transmission and is logged by the Zone controller.



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Subscriber Unit	Individual serialized devices operating on the trunked system. Commonly referred to as radio, packset, portable, mobile, etc.
System ID	This is the special identification upon the control channel to identify the particular trunking system using this control channel; this is used by the subscriber units to verify they are operating upon the correct trunking system; it is sent about every 3 seconds on the control channel.
System Management Terminal	Computer used for system configuration, dynamic reconfiguration, down load of data to/from site, analysis of logging information, and other management tasks.
Talk-Around	Talk-around by-passes the repeater and talks directly to another unit. Units in the talk-around mode are operating in a conventional mode. See Simplex
Talkgroup	A talkgroup is the primary level of organization of users on a trunked radio system. Talkgroup activity is not heard by other talkgroups. Often referred to as channel.
Talkgroup ID	A distinct number assigned to each talkgroup allowing it to operate on the system.
TDMA	Time Division Multiple Access. A method for improving spectrum efficiency in an existing channel by allocating specific time slots to each user.
Transmitter	The portion of a radio device that sends out the radio signal.



Trunking	The sharing of a number of talk paths among many users. A method by which multiple channels are accessed for user needs. Channel assignments are more efficient than systems where channel access is limited to a single channel or require manual user channel switching. Creates spectrum efficiency
UHF	Ultra High Frequency. The frequencies between 450 and 470 Megahertz.
Unit ID	Unique id which has been assigned to a subscriber. See Subscriber ID.
UPS	Uninterruptible Power Supply. A battery backup device for AC powered equipment.
VHF	Very High Frequency. The frequencies between 150 and 174 Megahertz.
Vocoder	Abbreviation for voice encoder/decoder, a circuit that samples a voice frequency and then changes the sampled information into binary digits to modulate the carrier and decodes the digital signal back to voice audio..
Voice Channel	In a trunked system, a Voice Channel is an RF channel that is an available voice communication channel resource. For example, a ten channel trunked system has one control channel and nine voice channels.
Voting	The process by which geographically separated receivers pass their received signals to a common point at which the signals are compared and only the best signal is passed on for use.
VOX	Voice Operated Transmit a process for activating PTT by electronic recognition of a voice signal..
Working Channel	All repeater channels except the single control channel. Radios communicate in all modes via a working channel. Also known as a voice channel.
Yagi Antenna	A directional antenna that normally has a minimum front to back ratio of 20dB.
Zone Controller	Fault tolerant computer with hardware and software necessary to control the system.
Zone Watch	A diagnostic software tool used to monitor zone activity, providing real time display of all call activity as it occurs.

- **Back-up Network Control Center** -- The back-up Network Control Center (RCC) is normally the Regional Communications Center (RCC). Each RCC is responsible for a multi-county area that comprises dispatch jurisdiction of multiple primary RCCs. Each back-up RCC is responsible for monitoring the appropriate MAC but defers to the respective primary RCC for initial responses. RCCs are shown in Table 4.2.2. The **Primary Network Control Center** is defined below.
- **Cluster** – A Cluster is a term used when more than one repeater site collectively covers a large geographic area which can be more than one county/city. It may cover all or encompass portions of adjoining counties/cities. This is why enabling and disabling repeater functionality is critical to a successful mutual aid operation.
- **Local Communications (Dispatch) Center** – The local Communications Center (LCC) normally includes the County Sheriff's Office dispatch or local police dispatch center that would have use of local mutual aid channels (i.e., MA-TAC2, 3, and/or 4) to complement the State's MA-CALL and MA-TAC1.
- **Mutual Aid CALL** – A frequency pair is assigned to Mutual Aid CALL (MA-CALL) and is reused across the state as well as the nation. It is the same frequency pair no matter where you are. It is used to hail the

responsible Network Control Center (RCC) for the area. MA-CALL operates strictly in the repeater Disabled mode and is sometimes referred to as the “Hailing” channel. Regardless of what RCC(s) may exist in an area, at least one should hear hails on the MA-CALL channel with the primary or back-up RCC responding.



exist  
with

- **Mutual Aid TAC1** – A frequency pair is assigned to Mutual Aid TAC1 (MA-TAC1) that is reused across the state as well as the nation. It is the same frequency pair no matter where you are. It is used as a tactical or operational channel when adjoining counties/cities need to share communications. Although MA-TAC1 normally operates in the repeater Disabled mode, it can be put into Enabled mode for wide-area mobile communications. MA-TAC1 meets needs across multiple local jurisdictions.
- **Mutual Aid TAC2, 3 and 4** – Like MA-TAC1, a unique frequency pair is assigned to each MA-TAC2, 3, and 4 channels that is reused across the state as well as the nation. It is the same frequency pair no matter where you are. It is used as a tactical or operational channel when adjoining counties/cities need to share communications. Although MA-TAC2, 3, and 4 normally operate in the repeater Disabled mode, they can be put into Enabled mode for wide-area mobile communications. These channels are tailored to meet communications needs within local jurisdictions whereas MA-TAC1 meets needs across multiple local jurisdictions.
- **Regional Communications Center** – The primary Regional Communications Center (RCC) is normally the local Network Control Center (e.g., the county Sheriff’s Office dispatch) acting as the answering point for a coverage area or cluster. The primary RCC is responsible for answering MA-CALL 24 hours a day and assigning the appropriate MA-TAC channel for the response area



## Appendix I - San Luis Valley Digital Trunk Radio Protocols

# SAN LUIS VALLEY REGION

## STANDARDIZED DIGITAL TRUNK RADIO (DTR) PROTOCOLS

### Version 1.3

Prepared by the San Luis Valley Exercise Design Team  
June 01, 2006

#### 1.0 Purpose

1.1 The digital trunk radio (DTR) system is intended to improve and enhance voice communications between emergency response agencies within the San Luis Valley. It also provides effective communication links with other DTR users throughout the State of Colorado during periods of mutual aid.

1.2 These protocols provide a standardized and seamless method for all regional emergency response agencies to communicate and coordinate their actions, regardless of incident location. They are also in compliance with the “Standard Operational Procedures” published by the Consolidated Communications Network of Colorado, Inc. (CCNC). CCNC is a non-profit corporation organized exclusively for the purpose of managing the Statewide Digital Trunked Radio Network, under and by virtue of the laws of the State of Colorado.

#### 2.0 Background

2.1 Each emergency response agency within the San Luis Valley has received digital trunk radios in the form of portable (hand held), mobile (vehicle mounted), and/or base station units. Each agency also has DTR user groups and channels specific to their organization to use during day-to-day operations.

2.2 Since there are dozens of different emergency response agencies within the San Luis Valley, it is impractical to expect each DTR user to be familiar with all other DTR user groups and channels. This wide array of different DTR groups and channels has created difficulty when multiple agencies respond to an incident and attempt to communicate with each other.

2.3 During incidents involving more than one agency, or agencies arriving from another county, it is imperative that all responding units have available a simple and common method to communicate with the Incident Commander and other responding units.

#### 3.0 Reference Documents

3.1 Consolidated Communications Network of Colorado, Inc., “*Standard Operation Procedures*”, Revision 1, dated May 6, 2005. This document is available for viewing or downloading on the Internet at [www.ccncinc.org](http://www.ccncinc.org)

3.2 We also wish to acknowledge the Durango Fire and Rescue Authority in Durango, Colorado for providing the majority of radio procedures contained in these protocols.

#### 4.0 Procedures

4.1 In accordance with the National Incident Command System (NIMS), all radio transmissions during an incident should be “in the clear”. This means users should avoid the use of “10” codes or jargon that other responders may not be familiar with.

4.2 When making a transmission with digital trunk radios (DTR), press and hold the oval shaped “press-to-talk” button on the left side of the radio, then listen for the short “chirp”. Once the “chirp” is complete, you are ready to make your radio transmission.



4.3 Standard reverse transmission protocols will be observed. When making a call, state the then state your unit.

unit being called and

4.3.1 Example:

***Saguache County Public Health one [this is] San Luis Valley Public Health one [calling]***

4.4 There are two basic rules to follow to control communications:

4.4.1 Units must identify themselves in every transmission.

4.4.2 The receiver must acknowledge every message by repeating the essence of the message to the sender. This ensures that everyone understands the same message and terms.

4.4.2.1 Example:

***Engine one, [this is] Command [calling]***

***Engine one***

***Engine one, I would like you to advance a two inch hose to the stairwell on side two***

***Engine one copy, we will advance a two inch hose to the stairwell on side two***

4.4.3 If in doubt about terminology, say exactly what you mean. Listen before transmitting to make sure the channel is clear. Do not use airtime/DTR tower space with unimportant messages or details. Speak at a moderate rate and volume. Finish your sentence, don't trail off and hesitate after keying the microphone so you don't cut yourself off.

## 5.0 Mutual Aid Channels or "MAC" Channels

5.1 Each digital trunk radio in the State of Colorado has a number of common state-wide mutual aid channels (or MAC) programmed. Mutual aid channels are shown as MAC13 SW, MAC14 SW, etc. on the digital display screen on each DTR radio. These MAC channels correspond to geographical sector quadrants within the State of Colorado. Transmissions made on these MAC channels are routed through the DTR tower network located throughout the State of Colorado. Those common state-wide MAC channels are:

- 5.1.1 MAC 13 SW (southwest) through MAC 16 SW – The San Luis Valley region is in the Southwest sector of Colorado
- 5.1.2 MAC 17 NW (northwest) through MAC 20 NW
- 5.1.3 MAC 5 NE (northeast) through MAC 8 NE
- 5.1.4 MAC 9 SE (southeast) through MAC 12 SE
- 5.1.5 MAC 1 MET (metropolitan) through MAC 4 MET – Includes Boulder, Adams, Arapaho, Douglas, Jefferson, Broomfield and Denver counties

5.2 CCNC Standard Operation Procedures specify the following MAC 13 SW through MAC16 SW channel allocations:

- 5.2.1 MAC 13 SW – This talk group is not specified for a specific discipline by CCNC and will be assigned to hazardous materials agencies and/or coroners.
- 5.2.2 MAC 14 SW – This talk group has been allocated to fire agencies for mutual aid and coordination and communications.
- 5.2.3 MAC 15 SW – This talk group has been allocated to law enforcement agencies for mutual aid coordination and communications.
- 5.2.4 MAC 16 SW – This talk group has been allocated to emergency medical service (EMS) agencies for mutual aid coordination and communications.

5.3 Each DTR radio assigned to agencies within the San Luis Valley region also has the follow regional mutual aid channels (MAC) programmed:

- 5.3.1 ALA MAC – Alamosa County MAC
- 5.3.2 CON MAC – Conejos County MAC
- 5.3.3 COS MAC – Costilla County MAC
- 5.3.4 MIN MAC – Mineral County MAC
- 5.3.5 RG MAC – Rio Grande County MAC
- 5.3.6 SAG MAC – Saguache County MAC



5.4 If one or more of the MAC channels are unavailable, the Incident Commander on-scene dispatch center serving the county in which the incident is located, a MAC channel

will request, through the assignment.

## 6.0 Simplex (SIMP) Mode

6.1 Each DTR radio in the State of Colorado also has five “simplex” channels programmed. These are shown as SIMP 1 through SIMP 5 on the digital display screen on each DTR radio. Simplex transmissions are only for radio-to-radio communications. Simplex transmissions do not utilize the DTR tower network. Therefore, simplex transmissions have a relatively short range (5-10 miles depending of geography and structures located between sending and receiving units).

6.1 CCNC Standard Operation Procedures specify the following simplex channel allocations:

- 6.1.1 Simplex 1 – This talk group has been allocated to fire agencies for mutual aid coordination and communications.
- 6.1.2 Simplex 2 – This talk group has been allocated to law enforcement agencies for mutual aid coordination and communications.
- 6.1.3 Simplex 3 – This talk group has been allocated to EMS agencies for mutual aid coordination and communications.
- 6.1.4 Simplex 4 – This talk group is not specified for a specific discipline by CCNC and will be allocated to hazardous materials agencies for mutual aid coordination and communications.
- 6.1.5 Simplex 5 – This talk group is not specified for a specific discipline by CCNC and will be allocated to coroners for mutual aid coordination and communications.

## 7.0 Concept of operations within the San Luis Valley region involving more than one agency

7.1 The Incident Commander (IC) will select the mutual aid channel (MAC) for the county in which the incident is located. Example – If the incident is located in or near San Luis, the IC will select COS MAC on his DTR radio.

7.2 Responding emergency response units will make initial contact with the IC using the county MAC channel. Unless directed to do otherwise by the IC, arriving emergency response units will then select the appropriate simplex channel to coordinate and communicate with other units within their discipline.

7.2.1 Example – Fire units will select simplex 1 on their DTR radios.

7.3 If simplex DTR transmissions are ineffective due to geography and/or structures, emergency response units will select the appropriate Southwest Sector state-wide MAC channel to coordinate and communicate with other units within their discipline.

7.3.1 Example – Law enforcement units will select MAC 15 SW on their DTR radio.

7.4 Attachment 1 to these protocols shows a San Luis Valley regional DTR communications algorithm chart.

## 8.0 Status Reporting (Non-Emergent)

<b>Available</b>	Ready to respond to calls; location is optional
<b>Responding</b>	Used to specify an apparatus movement to a specific location in response to an alarm (non-code)
<b>In Quarters</b>	Used to indicate that a resource is at station
<b>In Service</b>	Unit is operating, but not in response to a dispatch
<b>Arrived</b>	Used to announce apparatus arrival at a non-emergency location
<b>Clear</b>	Used to indicate a unit is released from a scene
<b>Break</b>	Used to indicate a unit still has control of the channel, but needs a break before continuing transmission
<b>Same Traffic</b>	Used when a unit has the same message as a preceding transmission and does not want to repeat same traffic

## 9.0 Status Reporting (Emergent)

<b>Responding Emergent (location)</b>	Used to specify an apparatus movement to a specific location in response to an alarm (code)
<b>On Scene</b>	Used when units arrive at the scene of an incident
<b>Under Control</b>	Used by Incident Command to denote when an incident is stabilized



<b>Transporting Number</b>	Used to designate how many patients medic units are transporting
<b>Emergent</b>	Used to designate if patient transport is a “code” run
<b>Non-Emergent</b>	Used to designate that patient transport is “non-code”
<b>Evacuate</b>	Used to designate removal of civilians
<b>Cancel</b>	Self-explanatory
<b>Rescue</b>	Used to mean civilians are in immediate danger and must be removed; firefighters have verified the location of the civilians
<b>Search and Rescue</b>	Used to mean civilians are endangered, but their location is unknown
<b>Primary Search</b>	Used to mean that there is not a known life safety problem (unknown if occupied)
<b>All Clear</b>	Used to mean that a primary search has been done or occupants have confirmed no civilians are in danger
<b>Withdraw</b>	Used to mean that an orderly, proactive removal of firefighters is necessary
<b>Abandon</b>	Used to mean that firefighters are in immediate danger; exit quickly by whatever means necessary; an audible alert of three air horn blasts should also be used
<b>Emergency Break</b>	Clear the channel for emergency traffic
<b>Mayday</b>	Used by firefighters to indicate that they are in trouble and in need of intervention; repeat three times; may also be used for developing emergent situations on any emergency scene
<b>Intervention</b>	Used to mean immediate and calculated removal of endangered firefighters whose location is known and verified by the teams’ supervisors and RIT; also actions taken by RIT to ensure safety and survival of members operating at any emergency scene
<b>Command Terminated</b>	Used to indicate the last unit is clear and the incident is terminated

### 10.0 Standard Replies

<b>Affirmative</b>	Yes
<b>Negative</b>	No
<b>Can Handle</b>	Used by first arriving unit to announce ability to manage an incident without further assistance
<b>Copy</b>	Used to acknowledge a message received
<b>Disregard</b>	Self-explanatory
<b>Repeat</b>	Request to repeat unclear or unintelligible radio traffic
<b>Standby</b>	Request to hold radio traffic momentarily
<b>How Do You Copy</b>	Request for report on transmission quality
<b>Loud and Clear</b>	Self-explanatory
<b>Unreadable</b>	Self-explanatory

### 11.0 Digital Trunk Radio Towers in the San Luis Valley Region

Tower Name	Site Number as viewed in Digital Trunk Radio display
11.1 La Veta Pass	32
11.2 San Luis	40
11.3 Pool Table Mountain (Aqua Ramon)	42
11.4 San Antonio Mountain	45
11.5 Methodist Mountain	50
11.6 Alamosa	52
11.7 Saguache Peak	54
11.8 Monte Vista	61

